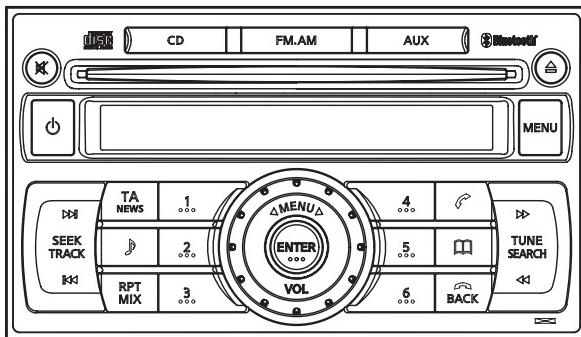


Service Manual



NISSAN Automobile Genuine
1CD LW/MW/FM/RDS Bluetooth
Combination

Model PN-3001P-A

(Genuine No.28185 9U10A)(ID No. CY02E)
(ES color : Black)

Model PP-3001M-A

(Genuine No.28185 BG10B)(ID No. CY01E)
(ES color : Brown)

Model PP-3001M-B

(Genuine No.28185 BG10A)(ID No. CY00E)
(ES color : Black)

SPECIFICATIONS

Radio section

Tuning system: PLL Frequency synthesizer system

Receive range: LW 153kHz to 279kHz
MW 531kHz to 1,602kHz
FM 87.5MHz to 108.0MHz

Intermediate frequency:

LW/MW/FM
10.7MHz

Quieting sensitivity: LW Less than 45dBu
(at 20dB S/N)
MW Less than 32dBu
(at 20dB S/N)
FM Less than 10dBu
(at 30dB S/N)

Separation: FM 22+5/-7dB(1kHz)

S/N ratio: LW More than 40dB
MW More than 40dB
FM More than 50dB

Auto tuning stop sensitivity:

LW/MW
40+6/-6dBu
FM 22+6/-6dBu

CD section

Disc: 12cm disc

Separation: More than 50dB
(1kHz, 20kHz L.P.F.)

S/N ratio: More than 74dB(JIS-A)
Distortion: Less than 0.2%(20kHz L.P.F.)

General

Load impedance: 4ohm/CH

Power output: 40W x4

Power supply voltage: DC13.2V(10.8 to 15.6V)
Negative ground

Back-up consumption: Less than 0.5mA

Dimensions(mm): 178(W) x 100(H) x 163(D)
Weight: 1.6kg

NOTES

- * As for this model, the tuner of the DSP type is used. When you exchange it due to the tuner pack(BL101;880-2091M) trouble, it is necessary to adjust for S-meter etc. Special JIG is necessary for an accurate adjustment. The procedure document for the exclusive use jig is appended to it.
- * This DSP IC SAF7730HV/N317(IC301) of Main PWB is exposed die soldering pad type. It cannot remove in an ordinary soldering iron. Please use special removal JIG at the time of IC exchange.
- * The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of suchmarks by CLARION CO.,LTD. is under license.
- * We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.
- * Specifications and design are subject to change without notice for further improvement.

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions in soldering

Please do not spread liquid flux in soldering.

Please do not wash the soldering point after soldering.

6. Cautions in soldering for chip capacitors

Please solder the chip capacitors after pre-heating for replacement because they are very weak to heat.

Please do not heat the chip capacitors with a soldering iron directly.

7. Cautions in handling for chip parts.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc).

Please make an operation test after replacement.

8. Cautions in handling flexible PWB

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.

9. Turn the unit OFF during disassembly and parts replacement.

Recheck all work before you apply power to the unit.

10. Cautions in checking that the optical pickup lights up.

The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

11. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

11-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

11-2. Actuator

The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

11-3. Cleaning the lens

Dust on the optical lens affects performance.

To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

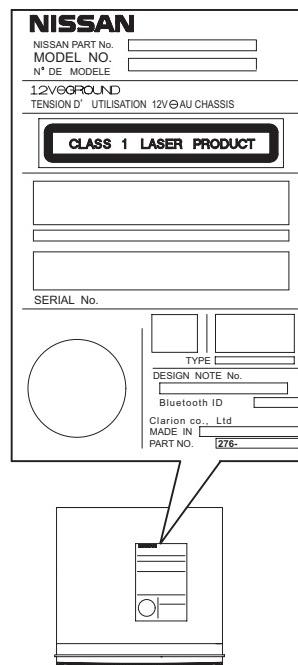
COMPONENT

PN-3001P-A, PP-3001M-A, PP-3001M-B

1. Main unit	-----	1
2. Radio pass card	-----	1

CAUTION

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for your future reference. In case of any trouble with this player, please contact your nearest "AUTHORIZED service station". To prevent direct exposure to the laser beam, do not open the enclosure.



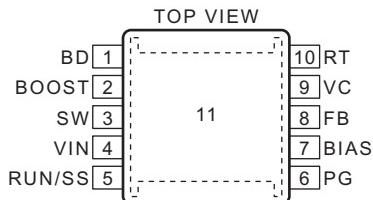
EXPLANATION OF IC

051-3396-90 NJM2386ADL3-33-TE1

Positive Voltage Regulator 3.3V



051-3517-90 impossible of exchange (LT3481EMSE#TRPBF)
Step-Down Switching Regulator



Terminal Description

BD (Pin 1):

This pin connects to the anode of the boost Schottky diode.

BOOST (Pin 2):

This pin is used to provide a drive voltage, higher than the input voltage, to the internal bipolar NPN power switch.

SW (Pin 3):

The SW pin is the output of the internal power switch. Connect this pin to the inductor, catch diode and boost capacitor.

VIN (Pin 4):

The VIN pin supplies current to the LT3481's internal regulator and to the internal power switch. This pin must be locally bypassed.

RUN/SS (Pin 5):

The RUN/SS pin is used to put the LT3481 in shutdown mode. Tie to ground to shut down the LT3481. Tie to 2.3V or more for normal operation. If the shutdown feature is not used, tie this pin to the VIN pin.

PG (Pin 6):

The PG pin is the open collector output of an internal comparator. PG remains low until the FB pin is within 10% of the final regulation voltage. PG output is valid when VIN is above 3.5V and RUN/SS is high.

BIAS (Pin 7):

The BIAS pin supplies the current to the LT3481's internal regulator. Tie this pin to the lowest available voltage source above 3V (typically VOUT). This architecture increases efficiency especially when the input voltage is much higher than the output.

FB (Pin 8):

The LT3481 regulates the FB pin to 1.265V. Connect the feedback resistor divider tap to this pin.

VC (Pin 9):

The VC pin is the output of the internal error amplifier. The voltage on this pin controls the peak switch current. Tie an RC network from this pin to ground to compensate the control loop.

RT (Pin 10):

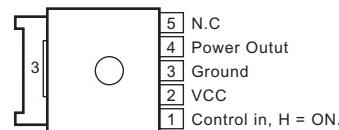
Oscillator Resistor Input. Connecting a resistor to ground from this pin sets the switching frequency.

Exposed Pad (Pin 11):

Ground. The Exposed Pad must be soldered to PCB.

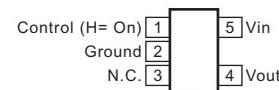
051-3518-90 NJM2846DL3-33-TE1

Positive Voltage Regulator 3.3V



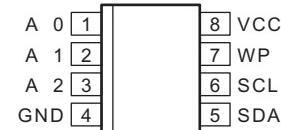
051-3519-90 NJU7771F05-TE2

Positive Voltage Regulator 5.0V



051-9425-80 S-24CS64A0I-J8T1G

EEP-ROM



Terminal Description

pin 1: A 0 :IN: Address input.

pin 2: A 1 :IN: Address input.

pin 3: A 2 :IN: Address input.

pin 4: GND : - : Ground.

pin 5: S DA :I/O: Serial data input/output.

pin 6: S CK :IN: Serial clock pulse input.

pin 7: Write Protect :IN: Write protect signal input.
H = protect ON.

pin 8: VCC : - : Positive voltage supply.

052-0320-00 M30876FJBG

System Controller

[Note] The program is not written in this IC. Therefore, you need to write a program in this IC with the part exchange.

Terminal Description for PN-3001

pin 1: NU :IN: Not in use.

pin 2: Speed Pulse :IN: Speed pulse input.

pin 3: IMMOBI TX :O: Serial data output for IMMOBI.

pin 4: IMMOBI RX :IN: Serial data input for IMMOBI.

pin 5: BU DET :IN: Backup detection signal input.

pin 6: GND : - : Ground.

pin 7: CN VSS :IN: Connect to VSS via a resistor.

pin 8: ILL ON :IN: Illumination ON signal input.

pin 9: SYS ON :O: System ON signal output.

pin 10: RESET :IN: Reset signal input.

pin 11: X out :O: Crystal connection.

pin 12: VSS : - : Negative voltage supply.

pin 13: X in :IN: Crystal connection.

pin 14: VDD : - : Positive voltage supply.

pin 15: NMI :IN: Nonmaskable interrupt. Connect to VDD via a resistor.

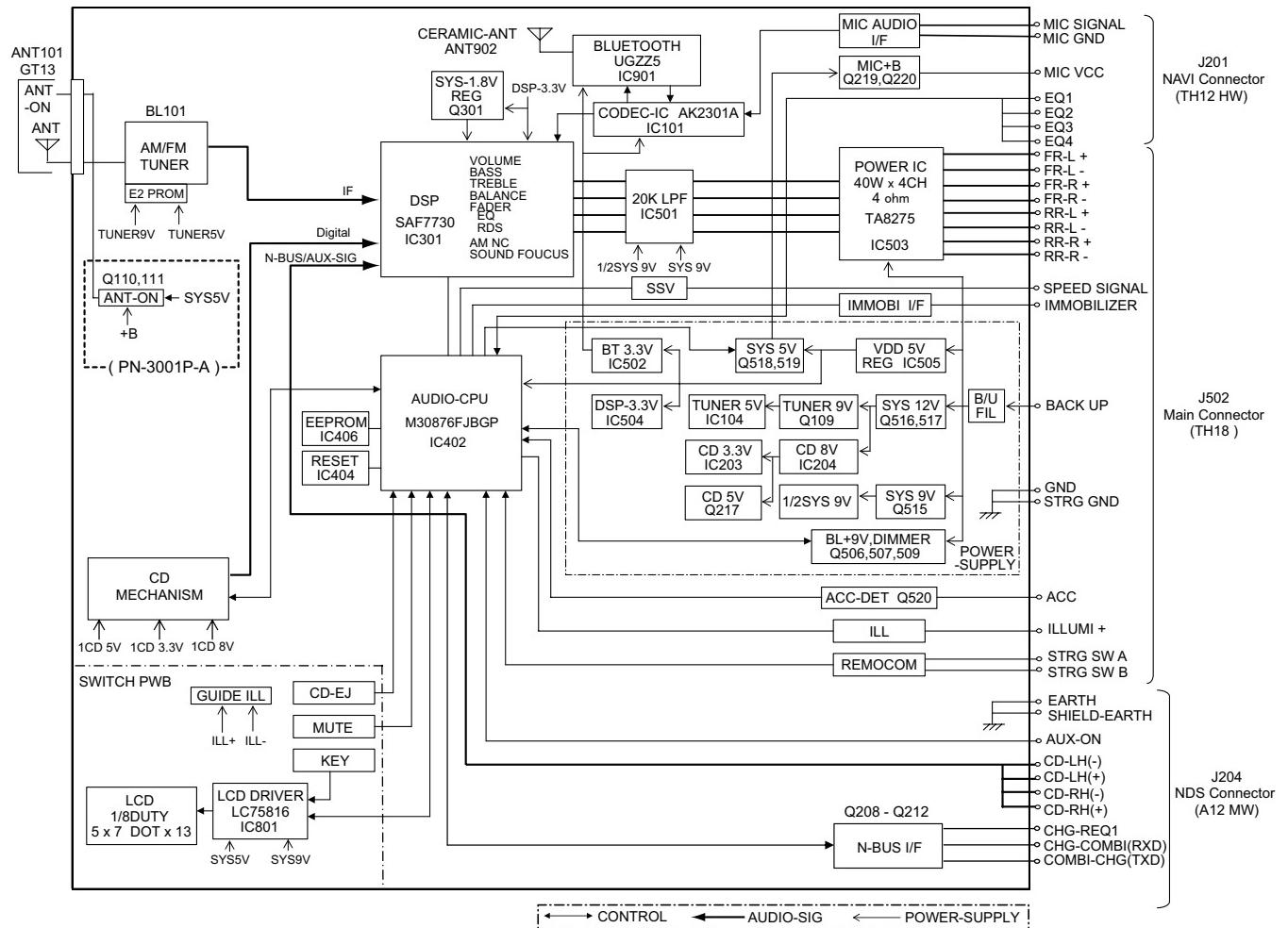
pin 16: ACC IN :IN: ACC ON flag input.

pin 17: PLL DO :O: PLL serial data output.

PN-3001P
PP-3001M

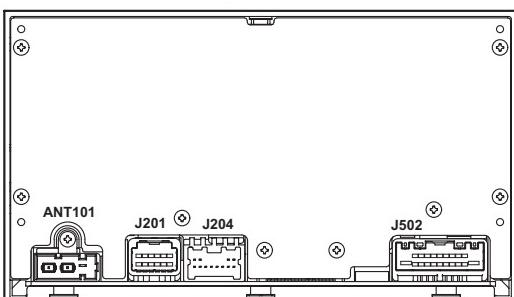
pin 18: NU	: - : Not in use.	pin 71: GS1 SBSY	:IN: 1CD sub code block synchronous signal input.
pin 19: B/T CTS	:IN: BT module UART flow control.	pin 72: RDS CL 1	:IN: RDS 1 serial clock output.
pin 20: B/T RX	:IN: BT module UART data input.	pin 73: RDS DA 1	:IN: RDS 1 serial data input.
pin 21: TIME BASE	:IN: Time base pulse input.	pin 74: NU	: - : Not in use.
pin 22: B/T TX	:O : BT module UART data output.	pin 75: P IC MUTE	:O : Muting-command output for the audio power IC.
pin 23: PLL CE	:O : PLL chip enable signal output.	pin 76: MH MUTE	:O : Muting-command output for RDS and DSP.
pin 24: DIMMER	:O : DIMMER output.	pin 77: M AGC BUFF	:IN: DSP Keyed AGC detection.
pin 25: PLL CK	:O : PLL clock pulse output.	pin 78: DSP RESET	:O : Reset signal output to the DSP IC.
pin 26: NU	: - : Not in use.	pin 79: MT S METER	:IN: Input of internal A/D converter to monitor the radio field strength for the Main-tuner.
pin 27: DSP SCL	:O : Clock pulse output to the DSP IC.	pin 80: MT SAMPLE	:IN: Main-tuner sample input.
pin 28: DSP SDA	:I/O: Serial data input/output for the digital signal processor.	pin 81: MT HOLD	:IN: AF-hold-signal input from the Main-tuner. And S-hold signal input from the DSP.
pin 29: NDS/BT TX	:O : Serial data output for NDS and Blue-tooth.	pin 82: EQ 1	:IN: The equalizer setting input.
pin 30: NDS/BT RX	:IN: Serial data input for NDS and Blue-tooth.	pin 83: EQ 2	:IN: The equalizer setting input.
pin 31: NDS REQ 1	:IN: NDS request signal input.	pin 84: EQ 3	:IN: The equalizer setting input.
pin 32: 1CD SLOT	: - : 1CD SLOT signal output.	pin 85: EQ 4	:IN: The equalizer setting input.
pin 33: NU	: - : Not in use.	pin 86: NU	:IN: Not in use.
pin 34: NU	: - : Not in use.	pin 87: CD EJECT	:IN: CD eject signal input.
pin 35: BUS CLOCK	:O : CD IC clock pulse output.	pin 88: LOAD	:IN: LOAD signal input.
pin 36: CCE	:O : Chip enable signal output.	pin 89: NU	: - : Not in use.
pin 37: BUS 0	:I/O: CD IC Data input / output.	pin 90: NU	: - : Not in use.
pin 38: BUS 1	:I/O: CD IC Data input / output.	pin 91: INI KEY	:IN: Initializing command input.
pin 39: BUS 2	:I/O: CD IC Data input / output.	pin 92: REMO A	:IN: Steering wheel remote controller signal input.
pin 40: BUS 3	:I/O: CD IC Data input / output.	pin 93: REMO B	:IN: Steering wheel remote controller signal input.
pin 41: RESET	:O : Reset signal output.	pin 94: A GND	: - : Analog ground.
pin 42: S STOP	:IN: Inside limit signal input from the CD mechanism.	pin 95: NU	: - : Not in use.
pin 43: CHU SW	:IN: CD disc chucking signal input.	pin 96: VREF	:IN: Reference voltage input.
pin 44: TR A	:IN: Photo sensor signal input from the CD mechanism.	pin 97: A VCC	: - : Positive voltage supply for the internal analog section.
pin 45: TR B	:IN: Photo sensor signal input from the CD mechanism.	pin 98: MT SCL	:IN: Main-tuner control clock pulse.
pin 46: LD CONT	:O : Loading signal output.	pin 99: MT SDA	:I/O: Serial data input/output for the Main-tuner.
pin 47: LD MUTE	:O : Muting signal output to the CD mechanism.	pin100: DSP PAUSE	:IN: DSP automatic mute control. L = mute on.
pin 48: CD ON	:O : CD ON signal output.		
pin 49: NU	: - : Not in use.		
pin 50: Power IC Stndb	:O : The standby signal output to the power IC.		
pin 51: LCD DO	:O : Serial data output to the LCD controller.		
pin 52: LCD CK	:O : Clock pulse output to the LCD driver.		
pin 53: LCD DI	:IN: Serial data input from the LCD driver.		
pin 54: LCD CE	:O : Chip enable signal output to the LCD driver.		
pin 55: LCD RST	:O : Reset pulse output to the LCD driver.		
pin 56: VOL 3	:IN: Volume control pulse input from the rotary encoder.		
pin 57: VOL 2	:IN: Volume control pulse input from the rotary encoder.		
pin 58: VOL 1	:IN: Volume control pulse input from the rotary encoder.		
pin 59: FAN ON	:O : The fan on signal output.		
pin 60: VDD	: - : Positive voltage supply.		
pin 61: POWER ON	:IN: Power ON signal input.		
pin 62: GND	: - : Ground.		
pin 63: BT-TEST-MODE	:O : BT test mode signal output.		
pin 64: AUX ON	:IN: AUX ON signal input.		
pin 65: DIAG INPUT	:IN: Diagnosis signal input from the audio power IC.		
pin 66: B/T RTS	:O : BT module UART flow control. AUX connection detection.		
pin 67: B/T TEST	:O : BT module test.		
pin 68: B/T BOOTE	:O : BT module rewrite.		
pin 69: B/T RESET P	:O : BT module reset.		
pin 70: NU	: - : Not in use.		

BLOCK DIAGRAM



CONNECTOR LAYOUT

Rear view of the unit



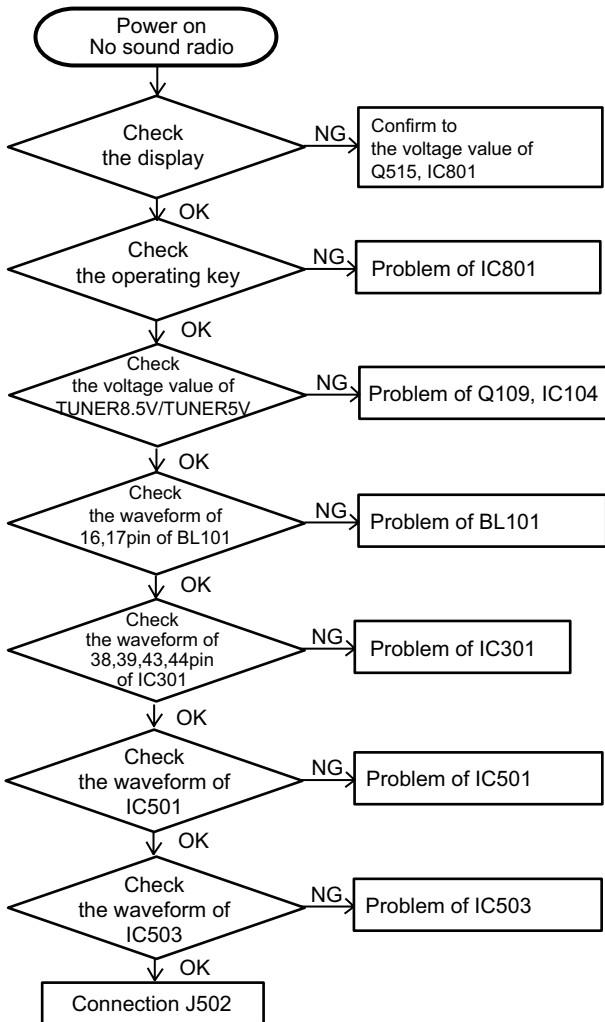
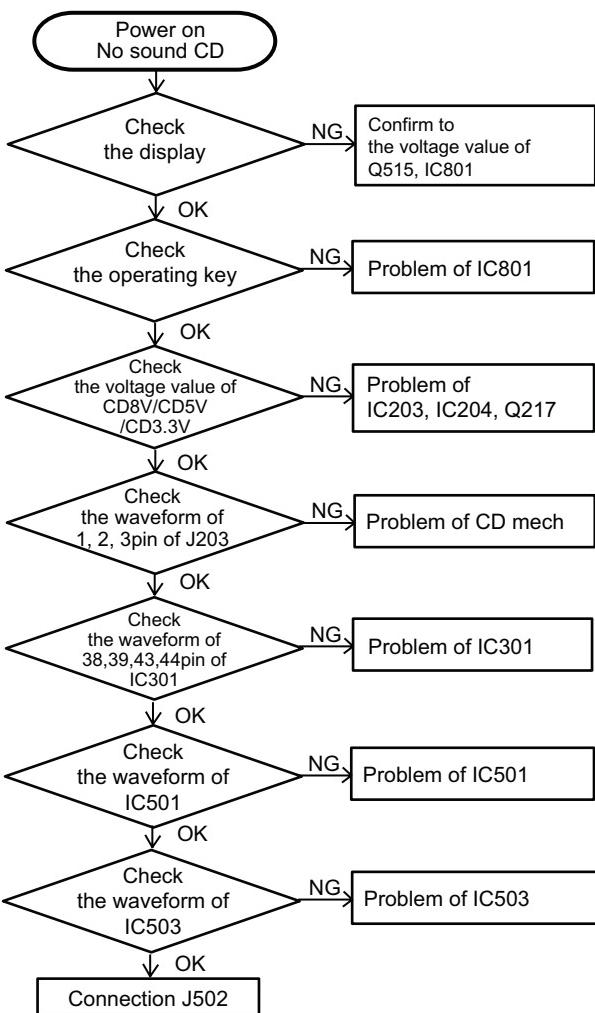
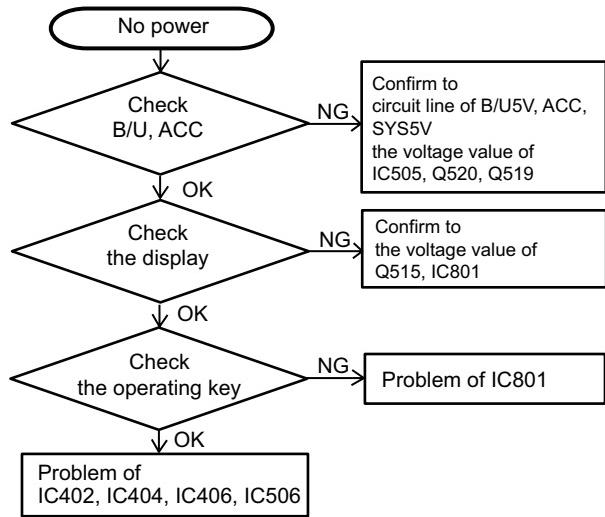
ANT101 ANT Connector (GT13)	
A	ANTENNA ON (PN-3001P-A)
N.C.	(PP-3001M-A) (PP-3001M-B)
B	ACTIVE ANT : USED ANTENNA BOOST AMP TYPE (PN-3001P-A)
C	PASSIVE ANT (PP-3001M-A) (PP-3001M-B)

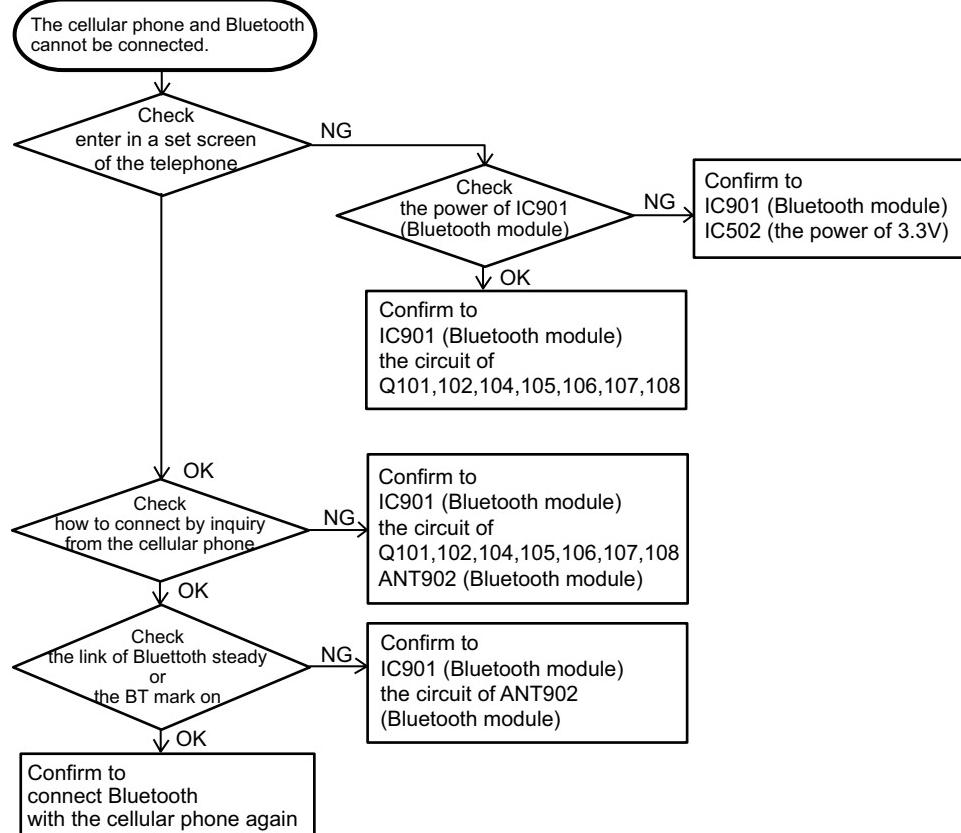
J201 NAVI Connector (TH12 HW)	
1	EQ1
2	EQ2
3	EQ3
4	EQ4
5	N.C.
6	N.C.
7	MIC SIGNAL
8	MIC GND
9	MIC VCC
10	N.C.
11	N.C.
12	N.C.

J204 NDS Connector (A12 MW)	
V02 V04	V10 V12
V01	V11
CD-LH(-)	
CD-LH(+)	
CD-RH(-)	
CD-RH(+)	
EARTH	
SHIELD-EARTH	
ACC	
N.C.	
CHG - REQ1	
CHG - COMBI (RXD)	
V09 V10 V11	
V03 V05 V06 V07 V08	
V01 V02 V03 V04 V05 V06 V07 V08 V09 V10 V11	
V10 COMBI - CHG (TXD)	
V11 N.C.	
V12 AUX-ON	

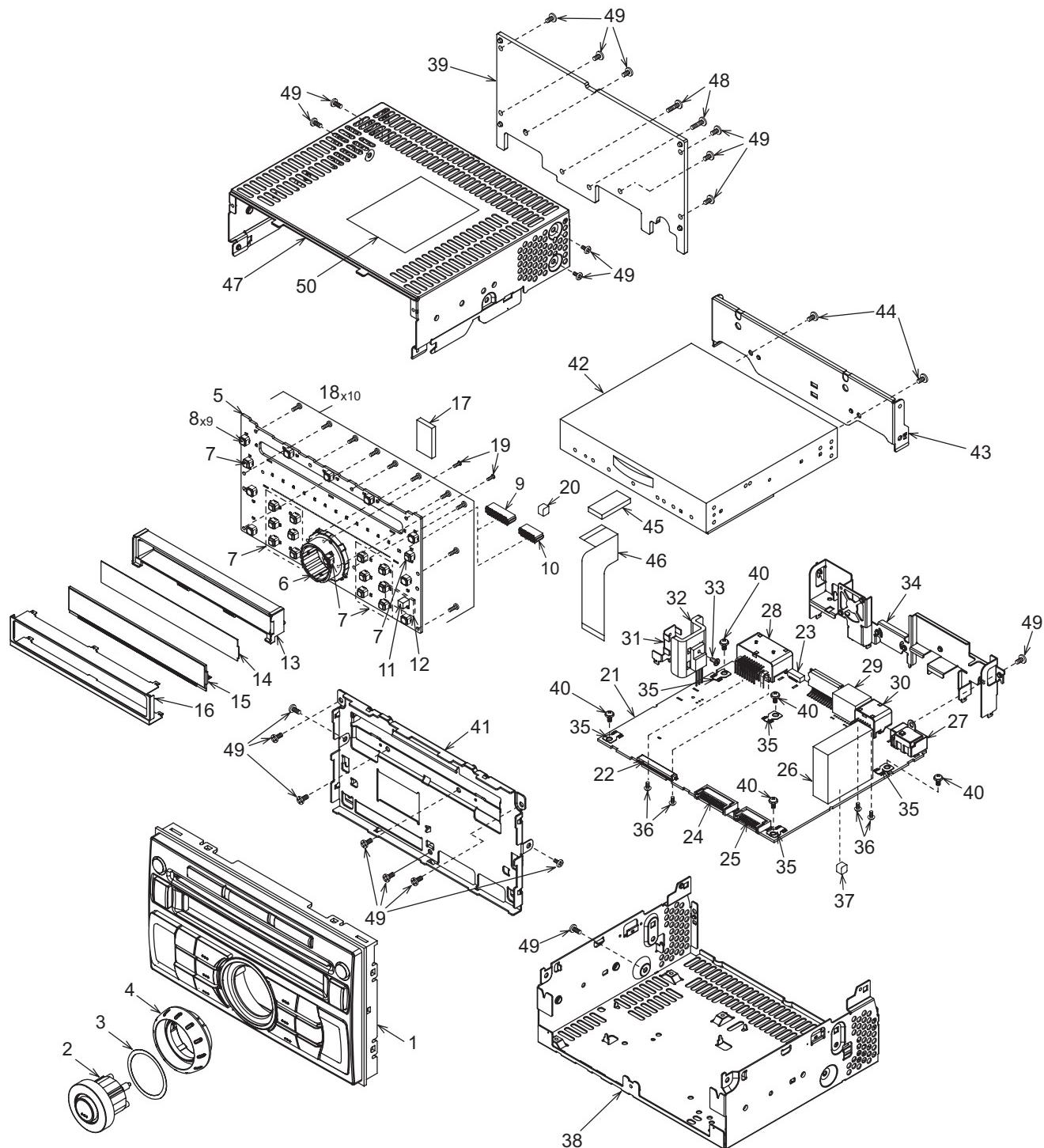
J502 Main Connector (TH18)	
1	N.C.
2	FRONT-RH(+)
3	FRONT-RH(-)
4	REAR-RH(+)
5	REAR-RH(-)
6	STRG GND
7	STRG SW A
8	STRG SW B
9	IMMOBILIZER
10	SPEED SIGNAL
11	BACK UP
12	N.C.
13	FRONT-LH(+)
14	FRONT-LH(-)
15	REAR-LH(+)
16	REAR-LH(-)
17	STRG GND
18	STRG SW A
19	STRG SW B
20	EARTH

TROUBLESHOOTING





EXPLODED VIEW/PARTS LIST



NO.	PART NO.	DESCRIPTION	Q'TY
1	940-8206-10 940-8206-11 940-8210-10	ES-ASSY (PN-3001P-A) ES-ASSY (PP-3001M-B) ES-ASSY (PP-3001M-A)	1
2	947-0591-00 947-0591-20	KNOB ASSY (PN-3001P-A)(PP-3001M-B) KNOB ASSY (PP-3001M-A)	1
3	347-7959-00	SHADE	1
4	380-5655-20	KNOB	1
5	-----	SWITCH PWB	1
6	016-7004-00	ROTARY SWITCH	1
7	013-6201-52	TACT SWITCH	15
8	013-6202-52	TACT SWITCH	9
9	074-3013-72	OUTLET SOCKET (22P)	1
10	074-3013-66	OUTLET SOCKET (16P)	1
11	060-8062-50	CERAMIC-ANT	1
12	060-8079-90	BLUETOOTH MODULE	1
13	335-7693-00	LCD HOLDER	1
14	335-7801-00	LCD LEFLECTOR	1
15	379-1392-50	INDICATOR (LCD)	1
16	331-4166-00	LCD COVER	1
17	345-5923-00	CUSHION RUBBER	1
18	716-0778-52	WAVE SCREW (2 x 6)	10
19	716-0872-51	PAD SCREW (M1.7 x 5)	2
20	345-5805-01	GASKET	1
21	-----	MAIN PWB	1
22	074-1237-79	OUTLET SOCKET (29P)	1
23	076-0478-59	PLUG (9P)	1
24	076-3011-72	PLUG (22P)	1
25	076-3011-66	PLUG (16P)	1

NO.	PART NO.	DESCRIPTION	Q'TY
26	880-2091M	TUNER PACK	1
27	092-2210-00	ANT RECEPTE	1
28	074-4009-20	OUTLET SOCKET	1
29	074-1013-00	OUTLET SOCKET	1
30	074-1302-12	OUTLET SOCKET	1
31	331-3880-00	TR HOLDER	1
32	313-1967-00	HEAT SINK	1
33	716-1646-50	IT SCREW (M2.6 x 8)	1
34	307-0720-00	REAR PLATE	1
35	073-0762-90	TERMINAL	5
36	778-3006-00	SPECIAL T-SCREW (3 x 6)	4
37	345-5805-01	GASKET	1
38	311-1914-00	LOWER CASE	1
39	313-1968-00	HEAT SINK	1
40	716-0878-50	SCREW (M2.6 x 5)	5
41	309-0822-10	ES PLATE (1CD)	1
42	929-5004-81	CD MECH MODULE	1
43	331-4123-00	CD BRKT	1
44	714-2603-89	MACHINE SCREW (M2.6x3)	2
45	345-5895-00	CUSHION RUBBER	1
46	816-4025-50	FLAT WIRE	1
47	310-1823-00	UPPER CASE	1
48	735-2614-1B	MACHINE SCREW (M2.6 x 14)	2
49	714-2606-8B	MACHINE SCREW (M2.6 x 6)	19
50	276-0034-53 276-0034-54 276-0034-57	SET PLATE (PP-3001M-A) SET PLATE (PP-3001M-B) SET PLATE (PN-3001P-A)	1

ELECTRICAL PARTS LIST

Switch PWB(B1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
ANT902	060-8062-50	CERAMIC-ANT	D835	001-7093-91	RFY1112H-16-TR	R802	119-3331-15	1/10W 33k ohm
C802	168-1042-78	16V 0.1uF		YEL		R803	119-1021-15	1/10W 1k ohm
C803	168-1042-78	16V 0.1uF	D836	001-7093-91	RFY1112H-16-TR	R804	116-3321-15	1/4W 3.3k ohm
C804	168-4732-78	0.047uF K		YEL		R805	116-3321-15	1/4W 3.3k ohm
C805	168-4732-78	0.047uF K	D837	001-7093-91	RFY1112H-16-TR	R806	116-3321-15	1/4W 3.3k ohm
C806	168-4732-78	0.047uF K		YEL		R807	116-3321-15	1/4W 3.3k ohm
C807	166-2211-50	220pF CH	D838	001-7093-91	RFY1112H-16-TR	R808	116-3321-15	1/4W 3.3k ohm
C901	168-1042-78	16V 0.1uF		YEL		R809	116-3921-15	1/4W 3.9k ohm
C902	166-1011-50	100pF CH	D839	001-7093-91	RFY1112H-16-TR	R810	116-2421-15	1/4W 2.4k ohm
C903	168-1042-78	16V 0.1uF		YEL		R811	116-4721-15	1/4W 4.7k ohm
C904	166-1011-50	100pF CH	D846	001-7093-91	RFY1112H-16-TR	R812	116-4721-15	1/4W 4.7k ohm
C905	166-1011-50	100pF CH		YEL		R813	116-4721-15	1/4W 4.7k ohm
C906	042-0423-97	16V 10uF	D847	001-7093-91	RFY1112H-16-TR	R814	116-4721-15	1/4W 4.7k ohm
C907	168-1042-78	16V 0.1uF		YEL		R815	116-2221-15	1/4W 2.2k ohm
C908	168-1042-78	16V 0.1uF	D848	001-7093-91	RFY1112H-16-TR	R816	116-2221-15	1/4W 2.2k ohm
C909	178-3312-78	330pF		YEL		R817	119-2021-15	1/10W 2.0k ohm
CCT801	050-0145-52	1/16W 1k ohm x4	D849	001-7093-91	RFY1112H-16-TR	R819	116-3321-15	1/4W 3.3k ohm
D801	001-0529-32	MA8056-M		YEL		R822	119-2421-15	1/10W 2.4k ohm
D802	001-0529-32	MA8056-M	D850	001-7093-91	RFY1112H-16-TR	R823	116-4721-15	1/4W 4.7k ohm
D803	001-0529-32	MA8056-M		YEL		R824	119-2421-15	1/10W 2.4k ohm
D804	001-0529-32	MA8056-M	D851	001-7093-91	RFY1112H-16-TR	R825	116-4721-15	1/4W 4.7k ohm
D805	001-0529-32	MA8056-M		YEL		R826	119-2421-15	1/10W 2.4k ohm
D806	001-7093-91	RFY1112H-16-TR	D852	001-7093-91	RFY1112H-16-TR	R827	116-3921-15	1/4W 3.9k ohm
	YEL			YEL		R828	119-2421-15	1/10W 2.4k ohm
D807	001-7093-91	RFY1112H-16-TR	D853	001-7093-91	RFY1112H-16-TR	R829	116-2421-15	1/4W 2.4k ohm
	YEL			YEL		R830	119-2421-15	1/10W 2.4k ohm
D808	001-7093-91	RFY1112H-16-TR	D855	001-7093-91	RFY1112H-16-TR	R831	116-4721-15	1/4W 4.7k ohm
	YEL			YEL		R832	119-2421-15	1/10W 2.4k ohm
D809	001-7093-91	RFY1112H-16-TR	D856	001-7093-91	RFY1112H-16-TR	R833	119-2021-15	1/10W 2.0k ohm
	YEL			YEL		R905	119-2711-15	1/10W 270 ohm
D810	001-7093-91	RFY1112H-16-TR	D857	001-7093-91	RFY1112H-16-TR	R909	119-1031-15	1/10W 10k ohm
	YEL			YEL		R914	119-5631-15	1/10W 56k ohm
D811	001-7093-91	RFY1112H-16-TR	D858	001-7093-91	RFY1112H-16-TR	R916	119-1821-15	1/10W 1.8k ohm
	YEL			YEL		R917	119-2711-15	1/10W 270 ohm
D812	001-7093-91	RFY1112H-16-TR	D859	001-7093-91	RFY1112H-16-TR	R918	119-1011-15	1/10W 100 ohm
	YEL			YEL		R919	119-1011-15	1/10W 100 ohm
D813	001-7093-91	RFY1112H-16-TR	D860	001-7093-91	RFY1112H-16-TR	S801	016-7004-00	ROTARY SWITCH
	YEL			YEL		S802	013-6201-52	SKPMAP010
D814	001-7093-91	RFY1112H-16-TR	D861	001-7093-91	RFY1112H-16-TR	S803	013-6202-52	SKPMBJE010
	YEL			YEL		S804	013-6202-52	SKPMBJE010
D815	001-7093-91	RFY1112H-16-TR	D862	001-7093-91	RFY1112H-16-TR	S807	013-6202-52	SKPMBJE010
	YEL			YEL		S808	013-6201-52	SKPMAP010
D816	001-7093-91	RFY1112H-16-TR	D864	001-7093-91	RFY1112H-16-TR	S809	013-6201-52	SKPMAP010
	YEL			YEL		S810	013-6202-52	SKPMBJE010
D817	001-7093-91	RFY1112H-16-TR	D865	001-7093-91	RFY1112H-16-TR	S811	013-6202-52	SKPMBJE010
	YEL			YEL		S812	013-6202-52	SKPMBJE010
D818	001-7093-91	RFY1112H-16-TR	D866	001-7093-91	RFY1112H-16-TR	S813	013-6201-52	SKPMAP010
	YEL			YEL		S814	013-6201-52	SKPMAP010
D819	001-7093-91	RFY1112H-16-TR	D867	001-7093-91	RFY1112H-16-TR	S815	013-6202-52	SKPMBJE010
	YEL			YEL		S816	013-6202-52	SKPMBJE010
D820	001-7093-91	RFY1112H-16-TR	D869	001-7093-91	RFY1112H-16-TR	S818	013-6201-52	SKPMAP010
	YEL			YEL		S819	013-6201-52	SKPMAP010
D821	001-7093-91	RFY1112H-16-TR	D870	001-7093-91	RFY1112H-16-TR	S820	013-6201-52	SKPMAP010
	YEL			YEL		S821	013-6202-52	SKPMBJE010
D822	001-7093-91	RFY1112H-16-TR	IC801	051-6075-00	LC75816W-8722-E	S822	013-6201-52	SKPMAP010
	YEL		IC901	060-8079-90	UGZZ5-601D	S823	013-6201-52	SKPMAP010
D823	001-7093-91	RFY1112H-16-TR	J801	074-3013-72	22P	S824	013-6201-52	SKPMAP010
	YEL		J901	074-3013-66	16P	S825	013-6201-52	SKPMAP010
D824	001-7093-91	RFY1112H-16-TR	LCD801	379-1392-50	INDICATOR (LCD)	S826	013-6201-52	SKPMAP010
	YEL		L901	010-3104-54	600 ohm/100MHz	S827	013-6201-52	SKPMAP010
D830	001-7093-91	RFY1112H-16-TR	L902	010-3104-54	600 ohm/100MHz	S828	013-6201-52	SKPMAP010
	YEL		L903	010-3104-54	600 ohm/100MHz	TM901	073-0778-90	TERMINAL
D831	001-7093-91	RFY1112H-16-TR	L904	010-3104-54	600 ohm/100MHz	TM902	073-0778-90	TERMINAL
	YEL		L906	010-3104-54	600 ohm/100MHz	TM903	073-0778-90	TERMINAL
D832	001-7093-91	RFY1112H-16-TR	L907	010-3104-54	600 ohm/100MHz	TM904	073-0778-90	TERMINAL
	YEL		L909	010-3104-54	600 ohm/100MHz	PWB	039-2925-01	PWB(WITHOUT COMPONENT)
D833	001-7093-91	RFY1112H-16-TR	L910	010-3104-54	600 ohm/100MHz			
	YEL		L911	010-3104-54	600 ohm/100MHz			
D834	001-7093-91	RFY1112H-16-TR	L912	010-3104-54	600 ohm/100MHz			
	YEL		R801	119-0000-05	1/10W 0 ohm JW			

Main PWB(B2) section

Note) Some parts depend on each model. The model name is specified in the description.

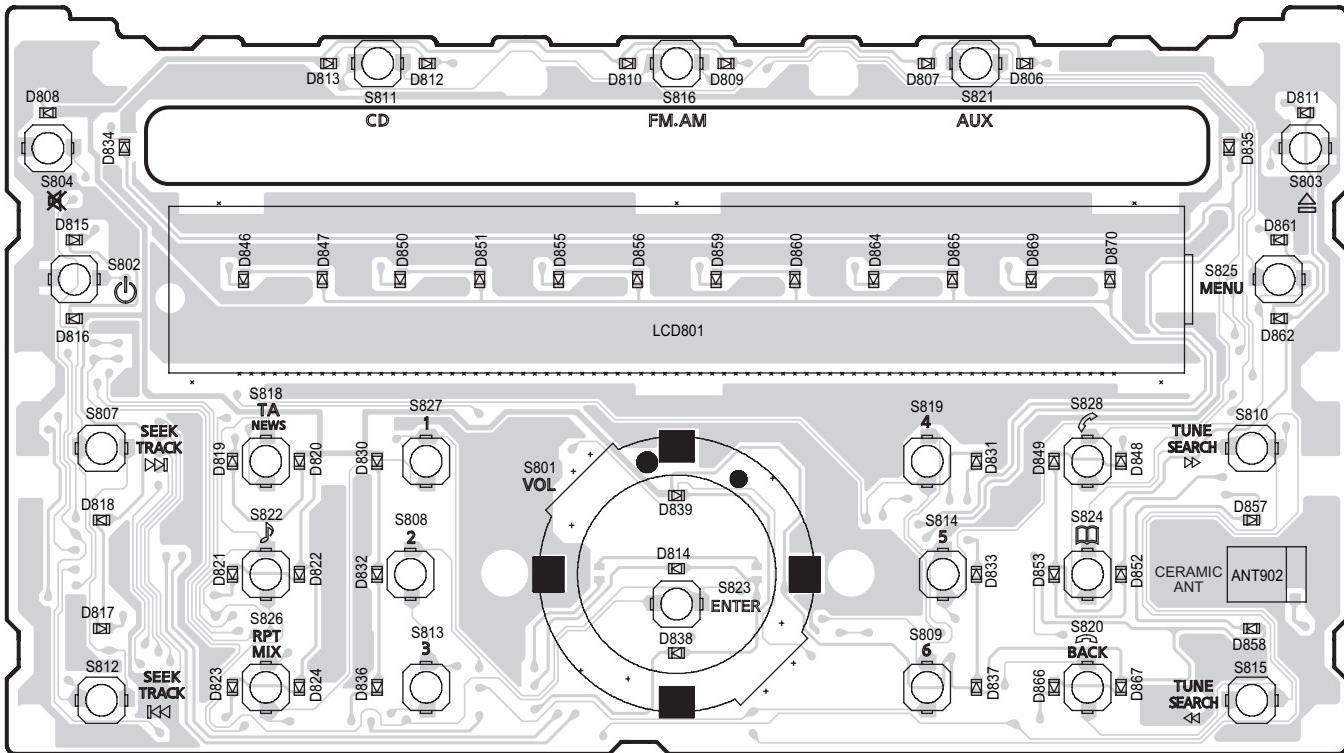
REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
ANT101	092-2210-00	ANTENNA RECEPT	C313	163-4753-65	50V 4.7uF	C525	163-1073-35	16V 100uF
BL101	880-2091M	FM/AM TUNER	C314	168-1042-78	16V 0.1uF	C530	163-1073-35	16V 100uF
C104	168-2222-55	2200pF K (PN-3001P)	C315	168-1022-55	1000pF K	C532	168-1042-78	16V 0.1uF
C108	119-0000-05	1/10W 0 ohm JW	C316	168-1022-55	1000pF K	C533	168-5632-78	16V 0.056uF
C109	166-2201-50	22pF CH	C317	166-1011-50	100pF CH	C534	168-5632-78	16V 0.056uF
C110	168-1042-78	16V 0.1uF	C318	168-1042-78	16V 0.1uF	C535	168-5632-78	16V 0.056uF
C111	178-3342-78	0.33uF	C319	168-5622-55	5600pF K	C536	168-5632-78	16V 0.056uF
C112	163-4763-15	6.3V 47uF	C320	168-5622-55	5600pF K	C537	178-1052-78	1uF
C113	178-1052-78	1uF	C323	168-1022-55	1000pF K	C540	163-1063-35	16V 10uF
C114	178-1052-78	1uF	C324	163-2273-05	4V 220uF	C541	168-1522-55	1500pF K
C115	119-0000-05	1/10W 0 ohm JW	C325	168-2222-55	2200pF K	C546	168-1042-78	16V 0.1uF
C116	168-1222-55	1200pF K	C326	166-4711-50	470pF CH	C547	178-1052-78	1uF
C117	178-1052-78	1uF	C327	163-2263-35	16V 22uF	C549	163-2273-25	10V 220uF
C118	168-4732-78	0.047uF K	C328	168-1022-55	1000pF K	C550	178-4742-78	0.47uF
C119	168-1022-55	1000pF K	C329	166-1007-50	10pF CH	C551	168-1042-38	50V 0.1uF
C120	168-4722-55	4700pF K	C330	163-1063-35	16V 10uF	C552	163-4763-35	16V 47uF
C121	168-4722-55	4700pF K	C331	166-1011-50	100pF CH	C553	163-4763-35	16V 47uF
C122	163-1073-35	16V 100uF	C333	168-1042-78	16V 0.1uF	C554	189-3383-31	16V 3300uF
C123	168-2222-55	2200pF K	C334	163-4763-15	6.3V 47uF	C556	172-1041-15	0.1uF
C124	168-1022-55	1000pF K	C335	178-1052-78	1uF	C557	163-4763-35	16V 47uF
C125	168-2232-55	0.022uF K	C336	168-3332-78	0.033uF K	C559	168-6822-55	6800pF K
C126	168-2232-55	0.022uF K	C338	168-1022-55	1000pF K	C560	168-6822-55	6800pF K
C127	168-1022-55	1000pF K	C339	168-1022-55	1000pF K	C561	168-6822-55	6800pF K
C128	168-1022-55	1000pF K	C340	166-1007-50	10pF CH	C562	168-6822-55	6800pF K
C129	178-1052-78	1uF	C341	168-4712-55	470pF K	C563	168-6822-55	6800pF K
C130	168-1022-55	1000pF K	C342	168-1042-78	16V 0.1uF	C564	166-2201-50	22pF CH
C131	163-1073-35	16V 100uF	C343	168-1022-55	1000pF K	C565	168-6822-55	6800pF K
C132	166-2201-50	22pF CH	C345	168-3322-55	3300pF K	C566	168-6822-55	6800pF K
C133	166-2201-50	22pF CH	C346	168-3322-55	3300pF K	C567	043-0604-90	25V 10uF B
C134	166-2201-50	22pF CH	C347	168-3322-55	3300pF K	C568	168-6822-55	6800pF K
C135	166-2201-50	22pF CH	C348	168-3322-55	3300pF K	C569	168-6822-55	6800pF K
C136	178-1052-78	1uF	C350	042-0643-58	6.3V 330uF	C571	043-0566-90	50V 2.2uF K
C137	178-1052-78	1uF	C351	168-4722-55	4700pF K	C572	178-1052-78	1uF
C138	178-3342-78	0.33uF	C352	168-2222-55	2200pF K	C573	168-1042-78	16V 0.1uF
C140	163-1063-35	16V 10uF	C353	168-2222-55	2200pF K	C574	163-1063-35	16V 10uF
C141	163-1063-35	16V 10uF (PN-3001P)	C354	168-2222-55	2200pF K	C575	168-2232-55	0.022uF K
C142	168-1042-78	16V 0.1uF	C355	168-2222-55	2200pF K	C576	163-1073-35	16V 100uF
C143	166-6801-50	68pF CH	C356	163-1073-15	6.3V 100uF	C577	168-2212-55	220pF K
C144	043-0548-50	2.2uF	C359	168-1022-55	1000pF K	C578	119-0000-05	1/10W 0 ohm JW
C201	043-0548-50	2.2uF	C360	166-4711-50	470pF CH	CCT301	050-0145-61	1/16W 0 ohm x4
C202	043-0548-50	2.2uF	C361	043-0554-90	25V 10uF	CCT401	050-0145-52	1/16W 1k ohm x4
C203	043-0548-50	2.2uF	C401	168-1042-78	16V 0.1uF	CCT402	050-0145-52	1/16W 1k ohm x4
C204	043-0548-50	2.2uF	C402	168-1042-78	16V 0.1uF	CCT403	050-0145-52	1/16W 1k ohm x4
C210	168-1022-55	1000pF K	C404	166-5096-50	5pF CH	CCT404	050-0145-52	1/16W 1k ohm x4
C211	168-1022-55	1000pF K	C406	166-5096-50	5pF CH	D106	001-0580-90	1SS352
C212	168-1022-55	1000pF K	C407	168-1042-78	16V 0.1uF	D108	001-0529-48	MA8091-H
C221	043-0554-90	25V 10uF	C408	163-4763-15	6.3V 47uF	D109	001-0580-90	1SS352 (PN-3001P)
C225	178-3342-78	0.33uF	C409	168-1042-78	16V 0.1uF	D201	001-4305-39	UDZSTE-17 36B
C227	042-0643-58	6.3V 330uF	C412	168-1032-55	0.01uF K	D202	001-0580-90	1SS352
C228	163-2273-25	10V 220uF	C413	163-1073-35	16V 100uF	D203	001-0580-90	1SS352
C229	163-1063-35	16V 10uF	C425	168-1042-78	16V 0.1uF	D205	001-0580-90	1SS352
C230	168-1042-78	16V 0.1uF	C501	168-1042-78	16V 0.1uF	D206	001-0529-32	MA8056-M
C232	163-1063-35	16V 10uF	C502	168-1042-78	16V 0.1uF	D207	001-0580-90	1SS352
C233	168-1042-78	16V 0.1uF	C503	168-1042-78	16V 0.1uF	D208	001-0580-90	1SS352
C239	168-1042-78	16V 0.1uF	C504	168-1042-78	16V 0.1uF	D210	001-0529-72	MA8200-M
C240	163-3363-25	10V 33uF	C505	166-5611-50	560pF CH	D211	001-9210-50	AVR-
C241	168-1022-55	1000pF K	C506	166-5611-50	560pF CH	D212	001-9210-50	M1608C270MTAAD
C242	168-1022-55	1000pF K	C507	166-5611-50	560pF CH	D213	001-9210-50	AVR-
C244	163-4763-35	16V 47uF	C508	166-5611-50	560pF CH	D214	001-9210-50	M1608C270MTAAD
C301	163-4753-65	50V 4.7uF	C509	166-2201-50	22pF CH	D401	001-0580-90	1SS352
C302	168-1042-78	16V 0.1uF	C510	166-2201-50	22pF CH	D505	001-0529-48	MA8091-H
C303	166-1811-50	180pF CH	C511	043-0554-90	25V 10uF	D506	001-2640-90	D1FJ4
C304	166-1007-50	10pF CH	C512	178-3342-78	0.33uF	D508	001-0529-48	MA8091-H
C306	168-1042-78	16V 0.1uF	C513	166-2201-50	22pF CH	D510	001-2015-00	RL253
C307	168-1042-78	16V 0.1uF	C514	166-2201-50	22pF CH	D511	001-0580-90	1SS352
C308	166-8097-50	8pF C CH	C516	166-5611-50	560pF CH	D512	001-0529-48	MA8091-H
C309	166-8097-50	8pF C CH	C517	166-5611-50	560pF CH	D514	001-0580-90	1SS352
C310	168-1022-55	1000pF K	C519	166-5611-50	560pF CH			
C311	163-4753-65	50V 4.7uF	C520	166-5611-50	560pF CH			
C312	168-1042-78	16V 0.1uF	C521	168-1042-78	16V 0.1uF			
			C522	178-3342-78	0.33uF			
			C523	163-1063-35	16V 10uF			

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
D515	001-0529-34	MA8062-L	Q218	125-9017-92	UMD3N-TR	R166	119-1031-15	1/10W 10k ohm
D516	001-0580-90	ISS352	Q219	125-2027-90	DTC143EU	R167	119-1031-15	1/10W 10k ohm
D567	001-0580-90	ISS352	Q220	191-1197-50	2SB1197K Q,R	R168	119-1031-15	1/10W 10k ohm
D568	001-0580-90	ISS352	Q301	125-7007-90	Si5441BDC-TI-E3	R169	119-1031-15	1/10W 10k ohm
D569	001-4301-68	HZU18B1	Q302	125-2027-91	DTC114EUA	R170	119-1031-15	1/10W 10k ohm
D570	001-4301-68	HZU18B1	Q303	125-2027-91	DTC114EUA	R171	119-0000-05	1/10W 0 ohm JW
D571	001-4301-68	HZU18B1	Q304	125-2027-91	DTC114EUA	R172	119-0000-05	1/10W 0 ohm JW
IC101	051-6524-90	AK2301A-E1	Q305	125-2027-91	DTC114EUA	R173	119-1531-15	1/10W 15k ohm
IC103	051-3034-90	NJM4558V	Q306	125-2027-91	DTC114EUA	R174	119-2231-15	1/10W 22k ohm
IC104	051-3519-90	NJU7771F05-TE2	Q307	125-2027-91	DTC114EUA	R175	119-1021-15	1/10W 1k ohm
IC107	051-7255-08	SN74AHC1G66	Q308	125-2027-91	DTC114EUA	R176	119-3931-15	1/10W 39k ohm
		HDCKR	Q401	125-2027-91	DTC114EUA	R177	119-6821-15	1/10W 6.8k ohm
IC203	051-3518-90	NJM2846DL3-33-TE1	Q402	125-0021-91	DTA114EUA	R201	119-1021-15	1/10W 1k ohm
			Q403	191-0709-00	2SB709A Q,R,S	R202	119-1021-15	1/10W 1k ohm
IC204	051-3340-00	LD1085P	Q404	192-2712-00	2SC2712	R207	119-3011-15	1/10W 300 ohm
IC301	-----	SAF7730HV/N317	Q405	125-2027-91	DTC114EUA	R208	119-3011-15	1/10W 300 ohm
IC402	052-0320-00	M30876FJBGP	Q406	125-0006-90	UN2110	R226	119-5621-15	1/10W 5.6k ohm
IC404	051-5417-08	S-80927CNMC-G8X	Q503	125-2027-91	DTC114EUA	R228	119-5621-15	1/10W 5.6k ohm
IC406	051-9425-80	S-24CS64A01-J8T1G	Q504	191-1197-50	2SB1197K Q,R	R231	119-5631-15	1/10W 56k ohm
IC501	051-3019-90	NJM2060V	Q506	125-2027-91	DTC114EUA	R232	119-5631-15	1/10W 56k ohm
IC502	051-3518-90	NJM2846DL3-33-TE1	Q507	191-1197-50	2SB1197K Q,R	R234	119-1031-15	1/10W 10k ohm
			Q509	193-2118-00	2SD2118F5 Q,R,S	R235	119-1031-15	1/10W 10k ohm
IC503	051-2042-00	TA8275H	Q512	125-2027-91	DTC114EUA	R238	119-5631-15	1/10W 56k ohm
IC504	051-3396-90	NJM2386ADL3-33-TE1	Q515	193-1664-00	2SD1664 P,Q,R	R239	119-1031-15	1/10W 10k ohm
IC505	051-3517-90	LT3481EMSE #TRPBFI	Q516	192-4116-51	2SC4116 G,L	R240	119-2231-15	1/10W 22k ohm
IC506	051-5441-08	BD4828G-TR	Q517	191-1204-61	2SB1204 R,S,T	R241	119-4731-15	1/10W 47k ohm
J201	074-1302-12	TH12P-SOCKET	Q518	125-2027-91	DTC114EUA	R246	117-2211-15	1/8W 220 ohm
J203	074-1237-79	SOCKET(29P)	Q519	191-1197-50	2SB1197K Q,R	R247	119-1041-15	1/10W 100k ohm
J204	074-1013-00	12P	Q520	192-4116-00	2SC4116	R248	116-2201-15	1/4W 22 ohm
J502	074-4009-20	SOCKET(20P)	Q521	192-4081-00	2SC4081	R249	032-0140-98	1/10W 330 ohm F
L105	010-2003-04	30uH	Q522	125-2027-91	DTC114EUA	R250	116-1221-15	1/4W 1.2k ohm
L106	010-3104-54	600 ohm/100MHz	Q523	192-4081-00	2SC4081	R251	032-0140-70	1/10W 1.8k ohm F
L107	010-3104-54	600 ohm/100MHz	R103	119-3321-15	1/10W 3.3k ohm	R252	119-1031-15	1/10W 10k ohm
L108	010-2198-50	0.15uH	R106	119-0000-05	1/10W 0 ohm JW	R254	119-1021-15	1/10W 1k ohm
L301	010-3104-54	600 ohm/100MHz	R109	119-3321-15	1/10W 3.3k ohm	R262	119-1021-15	1/10W 1k ohm
L302	010-3104-54	600 ohm/100MHz	R111	119-3321-15	1/10W 3.3k ohm	R266	119-0000-05	1/10W 0 ohm JW
L303	010-3104-54	600 ohm/100MHz	R112	119-0000-05	1/10W 0 ohm JW	R301	119-1031-15	1/10W 10k ohm
L304	010-3104-54	600 ohm/100MHz	R113	119-3321-15	1/10W 3.3k ohm	R302	119-1031-15	1/10W 10k ohm
L305	010-3104-54	600 ohm/100MHz	R116	119-2741-15	1/10W 270k ohm	R303	119-2201-15	1/10W 22 ohm
L306	010-3104-54	600 ohm/100MHz	R117	119-3331-15	1/10W 33k ohm	R304	032-0140-80	1/10W 18k ohm F
L307	010-3104-54	600 ohm/100MHz	R118	119-3931-15	1/10W 39k ohm	R305	032-0140-80	1/10W 18k ohm F
L308	010-3104-54	600 ohm/100MHz	R121	119-3931-15	1/10W 39k ohm	R306	032-0140-80	1/10W 18k ohm F
L309	010-3104-54	600 ohm/100MHz	R122	119-1031-15	1/10W 10k ohm	R307	032-0140-80	1/10W 18k ohm F
L310	010-3104-54	600 ohm/100MHz	R123	119-1031-15	1/10W 10k ohm	R314	119-1011-15	1/10W 100 ohm
L311	010-3104-54	600 ohm/100MHz	R124	119-3931-15	1/10W 39k ohm	R315	119-1031-15	1/10W 10k ohm
L312	010-3104-54	600 ohm/100MHz	R125	119-1031-15	1/10W 10k ohm	R316	119-1021-15	1/10W 1k ohm
L313	010-3104-54	600 ohm/100MHz	R126	119-1011-15	1/10W 100 ohm	R317	119-1031-15	1/10W 10k ohm
L402	010-3406-54	2.2uH J	R127	119-4731-15	1/10W 47k ohm	R318	119-3921-15	1/10W 3.9k ohm
L501	010-3104-54	600 ohm/100MHz	R128	119-4731-15	1/10W 47k ohm	R319	119-1031-15	1/10W 10k ohm
L503	010-3414-90	6.8uH	R129	119-4731-15	1/10W 47k ohm	R320	119-3921-15	1/10W 3.9k ohm
P101	076-3011-66	16P	R130	119-8221-15	1/10W 8.2k ohm	R321	119-1031-15	1/10W 10k ohm
P401	076-0478-59	PLUG (9P)	R131	119-1011-15	1/10W 100 ohm	R322	119-0000-05	1/10W 0 ohm JW
P402	076-3011-72	22P	R132	119-1011-15	1/10W 100 ohm	R323	119-1031-15	1/10W 10k ohm
Q101	198-3018-00	2SK3018	R134	119-1031-15	1/10W 10k ohm	R324	119-1041-15	1/10W 100k ohm
Q102	198-3018-00	2SK3018	R135	119-2231-15	1/10W 22k ohm	R325	119-1041-15	1/10W 100k ohm
Q104	125-9017-92	UMD3N-TR	R136	116-6891-15	1/4W 6.8 ohm	R326	119-1001-15	1/10W 10 ohm
Q105	125-2027-91	DTC114EUA	R138	119-1031-15	1/10W 10k ohm	R327	119-3921-15	1/10W 3.9k ohm
Q106	125-2027-91	DTC114EUA	R139	119-1041-15	1/10W 100k ohm	R328	119-0000-05	1/10W 0 ohm JW
Q107	125-2027-91	DTC114EUA	R140	119-1001-15	1/10W 10 ohm	R329	119-1021-15	1/10W 1k ohm
Q108	125-2027-91	DTC114EUA	R141	119-1031-15	1/10W 10k ohm	R330	119-3921-15	1/10W 3.9k ohm
Q109	192-5886-00	2SC5886	R143	119-2231-15	1/10W 22k ohm	R331	119-0000-05	1/10W 0 ohm JW
Q110	125-2027-90	DTC143EU (PN-3001P)	R144	119-2231-15	1/10W 22k ohm	R332	032-0140-50	1/10W 10k ohm F
Q111	190-2060-00	2SA2060 (PN-3001P)	R145	119-1001-15	1/10W 10 ohm	R334	032-0140-50	1/10W 10k ohm F
Q112	125-9017-92	UMD3N-TR	R146	119-1031-15	1/10W 10k ohm	R336	032-0140-50	1/10W 10k ohm F
Q208	192-4081-00	2SC4081	R148	116-1091-15	1/4W 1 ohm (PN-3001P)	R337	032-0140-50	1/10W 10k ohm F
Q209	192-4081-00	2SC4081	R149	116-1221-15	1/4W 1.2k ohm (PN-3001P)	R338	032-0140-50	1/10W 10k ohm F
Q210	192-4081-00	2SC4081	R150	116-3911-15	1/4W 390 ohm	R339	032-0140-50	1/10W 10k ohm F
Q211	125-0021-91	DTA114EUA	R151	119-1031-15	1/10W 10k ohm (PN-3001P)	R340	032-0140-50	1/10W 10k ohm F
Q212	125-2027-91	DTC114EUA	R153	119-1041-15	1/10W 100k ohm	R341	119-1031-15	1/10W 10k ohm
Q217	193-1664-00	2SD1664 P,Q,R	R162	119-0000-05	1/10W 0 ohm JW	R342	119-1031-15	1/10W 10k ohm
			R165	119-1031-15	1/10W 10k ohm	R343	119-1031-15	1/10W 10k ohm
						R344	119-1011-15	1/10W 100 ohm
						R345	119-1011-15	1/10W 100 ohm
						R346	119-0000-05	1/10W 0 ohm JW

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
R347	119-0000-05	1/10W 0 ohm JW	R448	119-4731-15	1/10W 47k ohm	R548	119-2241-15	1/10W 220k ohm
R348	119-0000-05	1/10W 0 ohm JW	R449	119-1021-15	1/10W 1k ohm	R551	119-1031-15	1/10W 10k ohm
R349	119-0000-05	1/10W 0 ohm JW	R450	119-1021-15	1/10W 1k ohm	R553	119-4721-15	1/10W 4.7k ohm
R350	119-1031-15	1/10W 10k ohm	R451	119-4731-15	1/10W 47k ohm	R554	032-0140-51	1/10W 15k ohm F
R351	119-0000-05	1/10W 0 ohm JW	R452	119-4731-15	1/10W 47k ohm	R556	119-4721-15	1/10W 4.7k ohm
R352	119-4731-15	1/10W 47k ohm	R453	119-4731-15	1/10W 47k ohm	R557	119-4721-15	1/10W 4.7k ohm
R353	119-1021-15	1/10W 1k ohm	R454	119-4731-15	1/10W 47k ohm	R563	116-3911-15	1/4W 390 ohm
R354	119-1021-15	1/10W 1k ohm	R455	119-2231-15	1/10W 22k ohm	R564	116-1221-15	1/4W 1.2k ohm
R355	119-1021-15	1/10W 1k ohm	R456	119-4731-15	1/10W 47k ohm	R565	116-1221-15	1/4W 1.2k ohm
R356	119-1021-15	1/10W 1k ohm	R458	119-1011-15	1/10W 100 ohm	R566	119-1521-15	1/10W 1.5k ohm
R357	119-4731-15	1/10W 47k ohm	R459	119-1011-15	1/10W 100 ohm	R567	119-1031-15	1/10W 10k ohm
R358	119-1001-15	1/10W 10 ohm	R460	119-4721-15	1/10W 4.7k ohm	R568	116-1221-15	1/4W 1.2k ohm
R359	119-4731-15	1/10W 47k ohm	R461	119-4721-15	1/10W 4.7k ohm	R569	116-1221-15	1/4W 1.2k ohm
R360	119-4731-15	1/10W 47k ohm	R462	119-1041-15	1/10W 100k ohm	R570	119-1031-15	1/10W 10k ohm
R361	119-4731-15	1/10W 47k ohm	R463	119-1041-15	1/10W 100k ohm	R571	119-4721-15	1/10W 4.7k ohm
R362	119-4731-15	1/10W 47k ohm	R464	119-2231-15	1/10W 22k ohm	R572	119-1031-15	1/10W 10k ohm
R400	119-0000-05	1/10W 0 ohm JW	R466	119-4731-15	1/10W 47k ohm	R573	032-0148-50	1/10W 100k ohm
R401	119-1021-15	1/10W 1k ohm	R467	119-4731-15	1/10W 47k ohm	R574	032-0140-16	1/10W 180k ohm F
R402	119-1021-15	1/10W 1k ohm	R468	119-1031-15	1/10W 10k ohm	R575	116-2721-15	1/4W 2.7k ohm
R403	119-1021-15	1/10W 1k ohm	R469	119-1031-15	1/10W 10k ohm	R576	116-1531-15	1/4W 15k ohm
R404	119-0000-05	1/10W 0 ohm JW	R470	119-4731-15	1/10W 47k ohm	R577	119-0000-05	1/10W 0 ohm JW
R405	119-1021-15	1/10W 1k ohm	R471	119-1241-15	1/10W 120k ohm	R578	119-2221-15	1/10W 2.2k ohm
R406	119-1021-15	1/10W 1k ohm	R472	119-3331-15	1/10W 33k ohm	R580	116-1531-15	1/4W 15k ohm
R407	119-1021-15	1/10W 1k ohm	R473	119-6801-15	1/10W 68 ohm	R581	119-1031-15	1/10W 10k ohm
R408	119-4721-15	1/10W 4.7k ohm	R474	119-2241-15	1/10W 220k ohm	R582	119-5611-15	1/10W 560 ohm
R409	119-4721-15	1/10W 4.7k ohm	R488	119-1031-15	1/10W 10k ohm	R583	116-4791-15	1/4W 4.7 ohm
R410	119-4731-15	1/10W 47k ohm	R489	119-4731-15	1/10W 47k ohm	R584	116-4791-15	1/4W 4.7 ohm
R411	119-3311-15	1/10W 330 ohm	R490	119-6821-15	1/10W 6.8k ohm	R585	119-1031-15	1/10W 10k ohm
R412	119-3311-15	1/10W 330 ohm	R502	119-1031-15	1/10W 10k ohm	R586	119-0000-05	1/10W 0 ohm JW
R413	119-4731-15	1/10W 47k ohm	R503	119-1031-15	1/10W 10k ohm	R587	119-2231-15	1/10W 22k ohm
R416	119-4731-15	1/10W 47k ohm	R504	119-1031-15	1/10W 10k ohm	R588	119-3321-15	1/10W 3.3k ohm
R417	119-4731-15	1/10W 47k ohm	R505	119-1031-15	1/10W 10k ohm	R590	119-0000-05	1/10W 0 ohm JW
R418	119-4711-15	1/10W 470 ohm	R507	119-1031-15	1/10W 10k ohm	R591	119-0000-05	1/10W 0 ohm JW
R419	119-4711-15	1/10W 470 ohm	R508	119-1031-15	1/10W 10k ohm	R592	119-0000-05	1/10W 0 ohm JW
R420	119-4711-15	1/10W 470 ohm	R509	119-1031-15	1/10W 10k ohm	R593	119-0000-05	1/10W 0 ohm JW
R421	119-4711-15	1/10W 470 ohm	R510	119-1031-15	1/10W 10k ohm	R594	119-0000-05	1/10W 0 ohm JW
R422	119-1011-15	1/10W 100 ohm	R511	119-0000-05	1/10W 0 ohm JW	R595	119-4731-15	1/10W 47k ohm
R423	119-1011-15	1/10W 100 ohm	R512	119-1031-15	1/10W 10k ohm	R596	119-4731-15	1/10W 47k ohm
R424	119-1011-15	1/10W 100 ohm	R513	119-1031-15	1/10W 10k ohm	R597	119-7531-15	1/10W 75k ohm
R425	119-1011-15	1/10W 100 ohm	R514	119-1051-15	1/10W 1M ohm	R598	119-4731-15	1/10W 47k ohm
R426	119-1011-15	1/10W 100 ohm	R515	119-1051-15	1/10W 1M ohm	R943	119-1021-15	1/10W 1k ohm
R427	119-1011-15	1/10W 100 ohm	R517	119-1051-15	1/10W 1M ohm	SUP102	060-0122-91	DSP-141N-S00B
R428	119-1031-15	1/10W 10k ohm	R518	119-1051-15	1/10W 1M ohm	TH101	002-0229-00	PTH8L05BAIR8M1B (PN-3001P)
R429	119-1031-15	1/10W 10k ohm	R519	119-1031-15	1/10W 10k ohm	TH201	002-0229-00	PTH8L05BAIR8M1B
R430	119-1031-15	1/10W 10k ohm	R520	119-1031-15	1/10W 10k ohm	T508	009-0670-81	180uH
R431	119-1031-15	1/10W 10k ohm	R521	119-1031-15	1/10W 10k ohm	TM101	073-0762-90	TERMINAL
R432	119-1031-15	1/10W 10k ohm	R522	119-1031-15	1/10W 10k ohm	TM102	073-0762-90	TERMINAL
R433	119-1031-15	1/10W 10k ohm	R523	119-1031-15	1/10W 10k ohm	TM201	073-0762-90	TERMINAL
R436	119-1021-15	1/10W 1k ohm	R524	119-1031-15	1/10W 10k ohm	TM501	073-0762-90	TERMINAL
R437	119-1021-15	1/10W 1k ohm	R525	119-1031-15	1/10W 10k ohm	TM502	073-0762-90	TERMINAL
R440	119-4721-15	1/10W 4.7k ohm	R526	119-1031-15	1/10W 10k ohm	X301	061-3537-90	41.6MHz
R441	119-1021-15	1/10W 1k ohm	R533	119-1031-15	1/10W 10k ohm	X401	061-3541-90	CRYSTAL 10MHz
R442	119-1031-15	1/10W 10k ohm	R534	119-1031-15	1/10W 10k ohm	PWB	039-3125-00	PWB(WITHOUT COMPONENT)
R443	119-4731-15	1/10W 47k ohm	R535	119-1031-15	1/10W 10k ohm			
R445	119-0000-05	1/10W 0 ohm JW	R540	116-6811-15	1/4W 680 ohm			
R446	119-4731-15	1/10W 47k ohm	R542	032-0140-03	1/10W 220k ohm F			
R447	119-1031-15	1/10W 10k ohm	R543	032-0140-19	1/10W 75k ohm F			

PRINTED WIRING BOARD

Switch PWB(B1) section

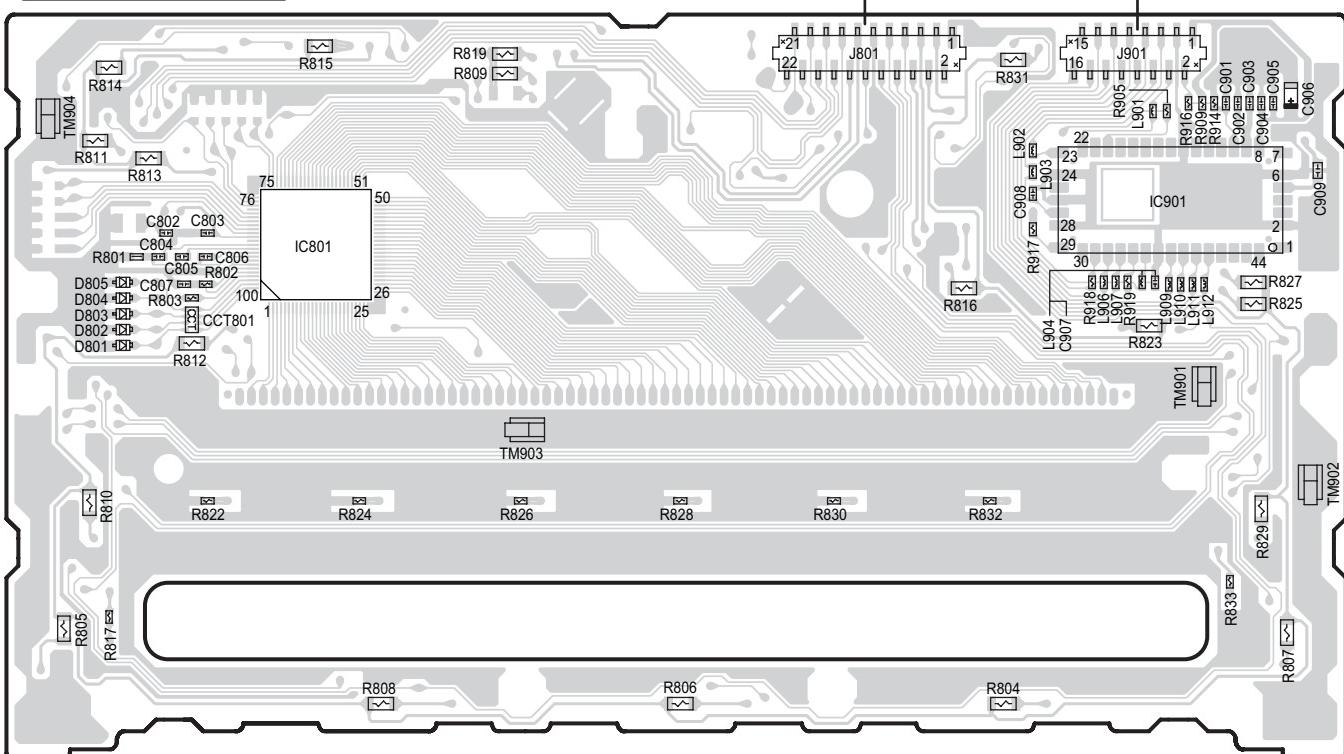


COMPONENT SIDE

Caution:
COMPONENT SIDE: Parts on the component side seen from the

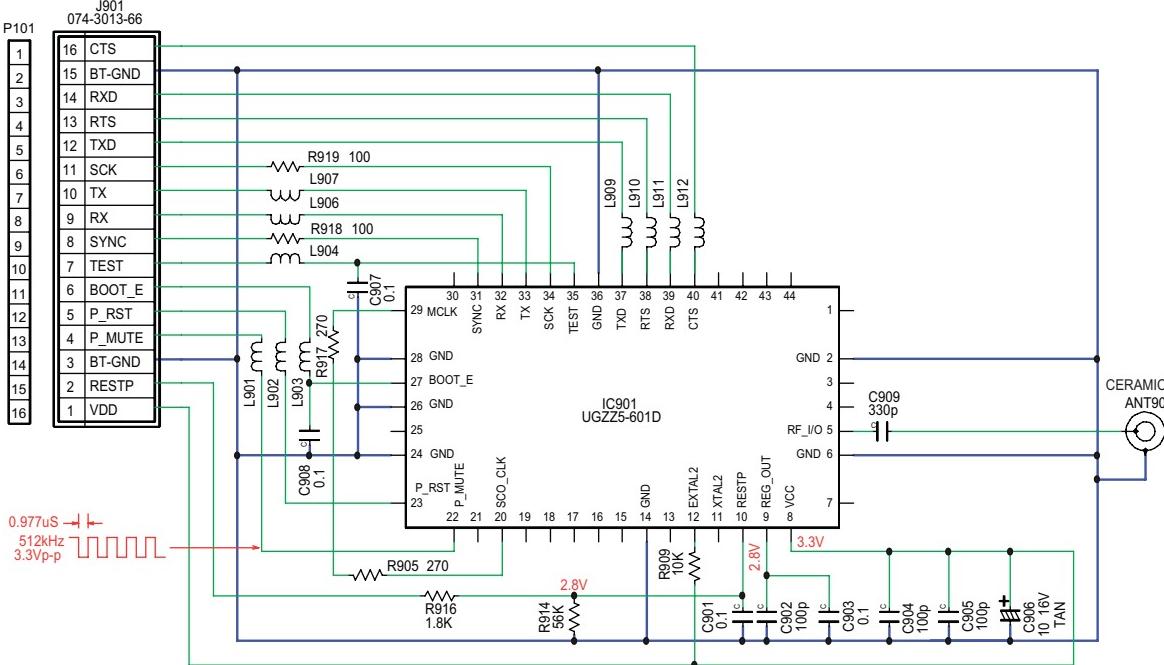
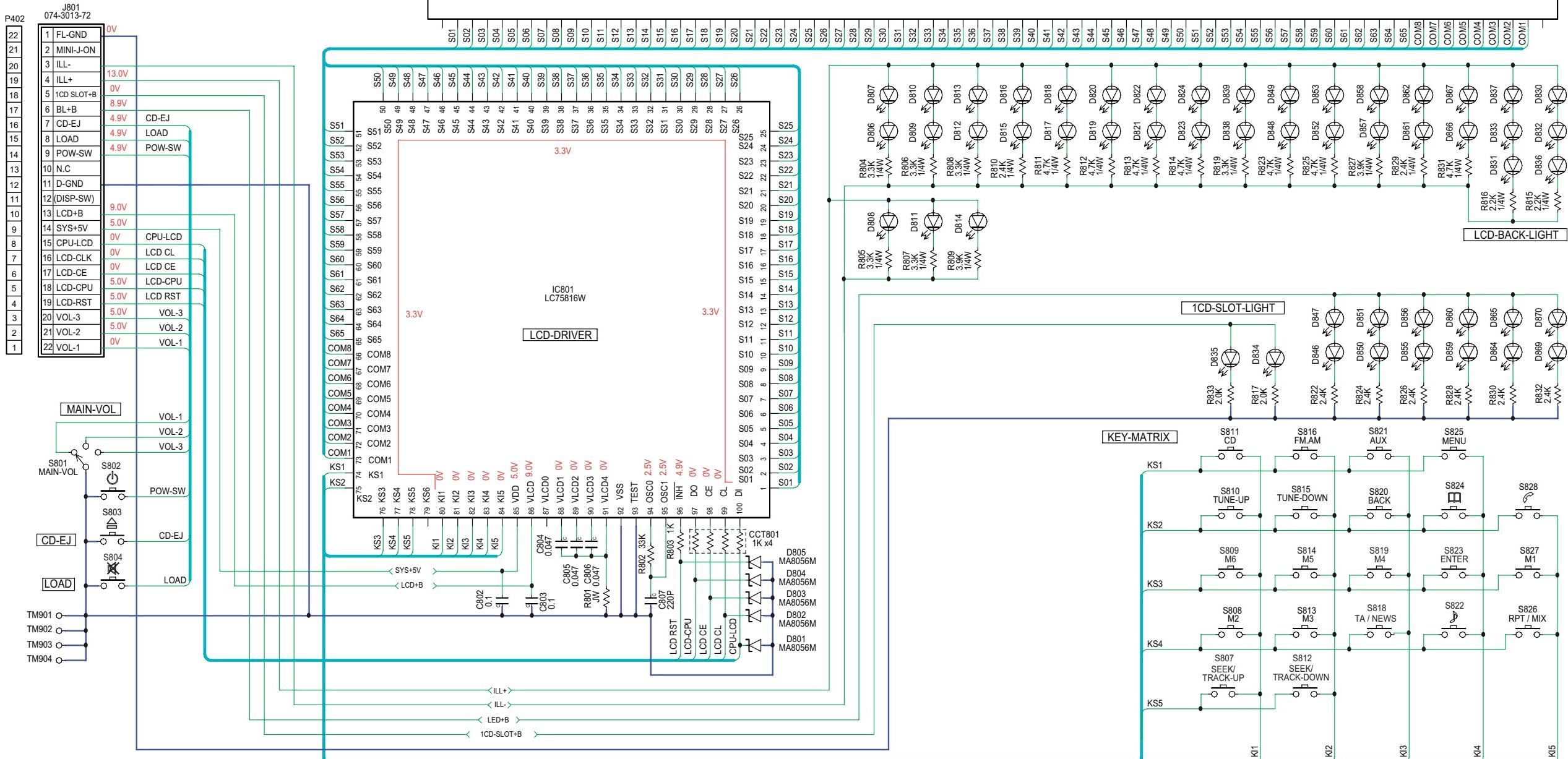
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.

SOLDER SIDE



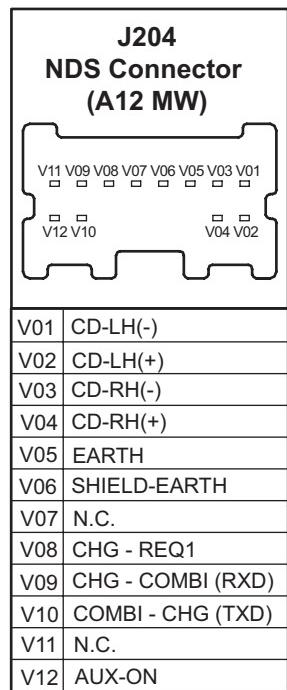
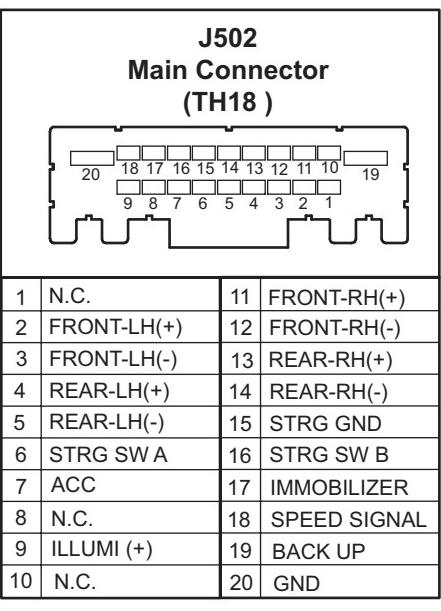
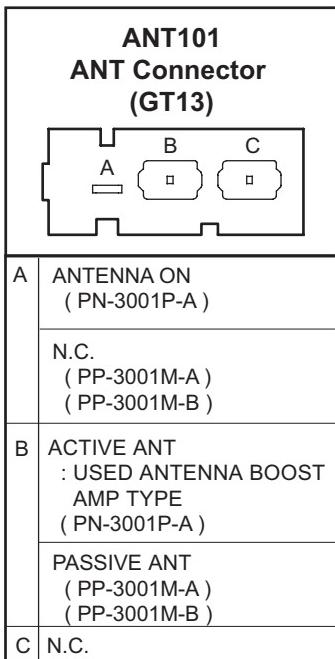
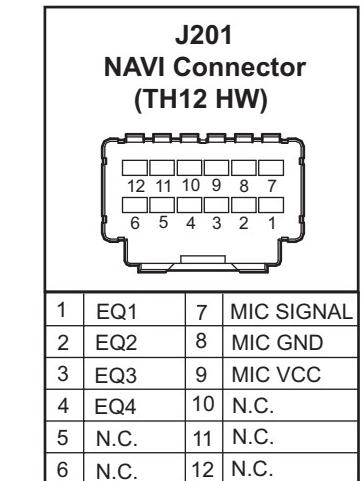
CIRCUIT DIAGRAM

Switch PWB(B1) section



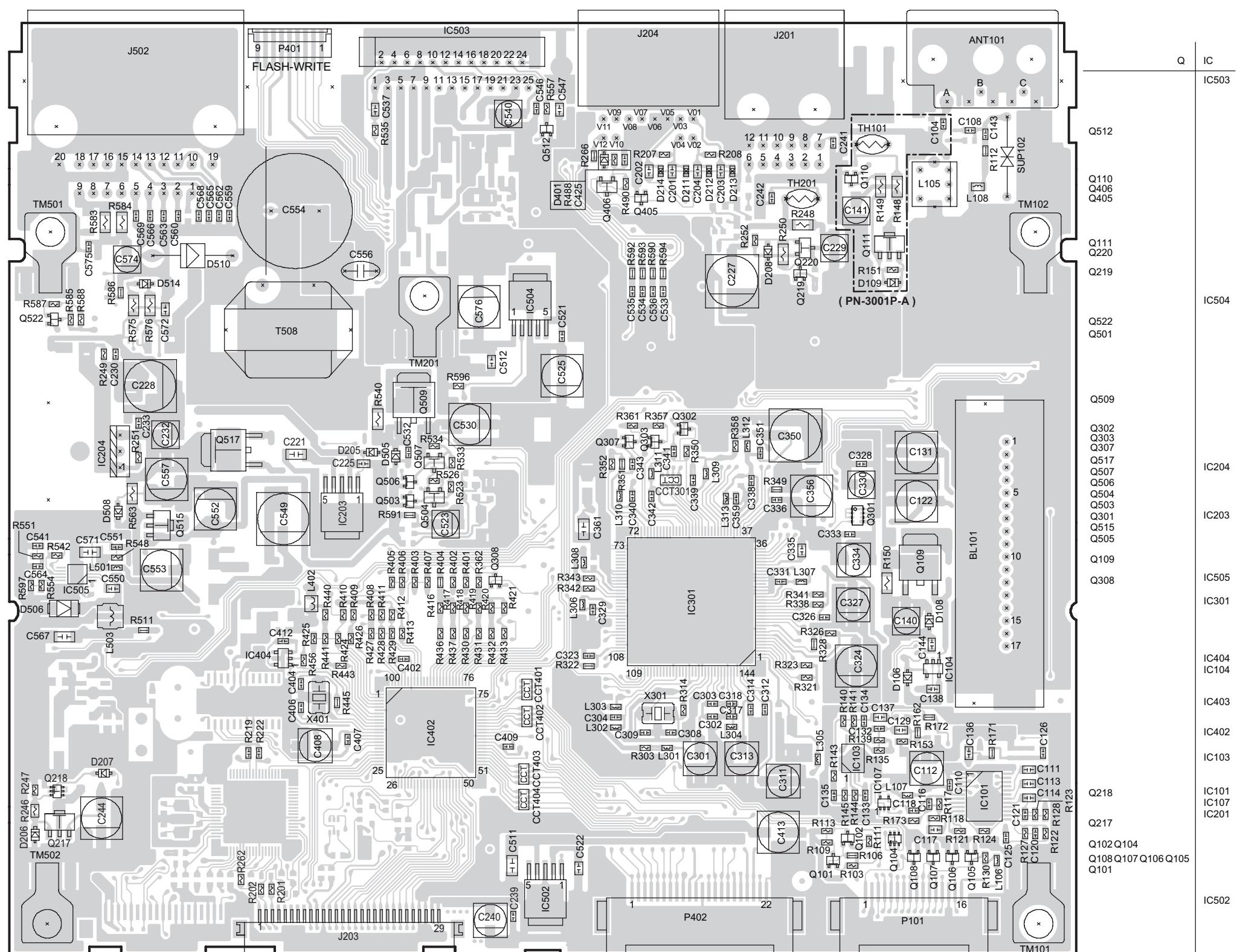
PRINTED WIRING BOARD

Main PWB(B2) section



COMPONENT SIDE

Caution:
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.



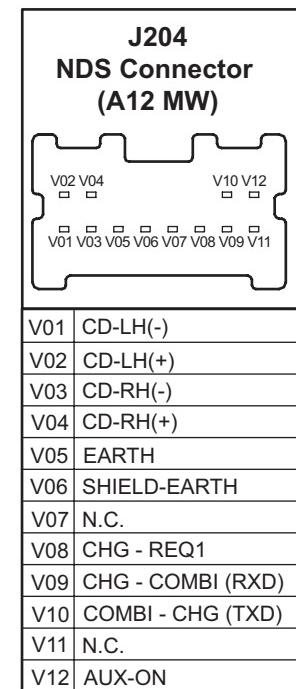
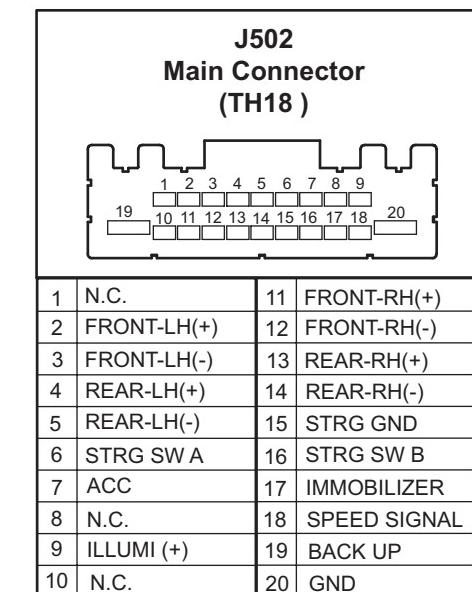
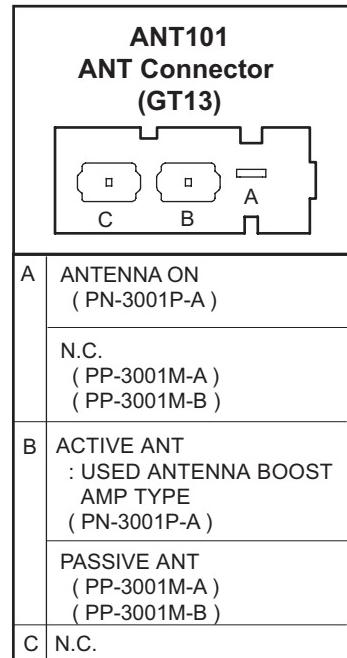
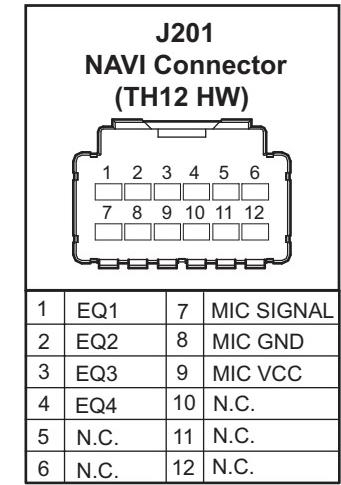
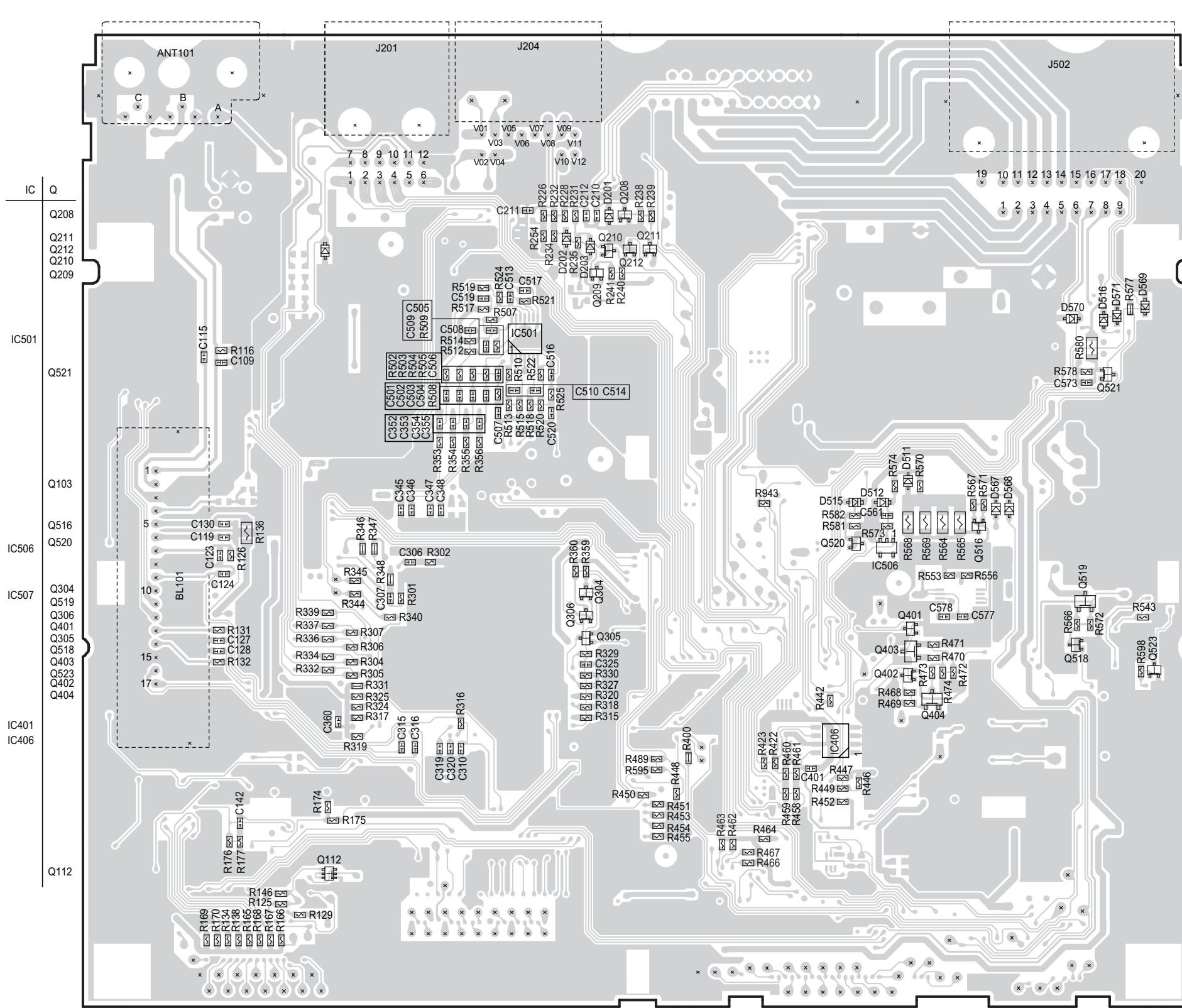
Flat wire
816-4025-50

To page M6
J101 of CD PWB
(CD mechanism)

To page 14
J801 of Switch PWB

To page 14
J901 of Switch PWB

Main PWB(B2) section



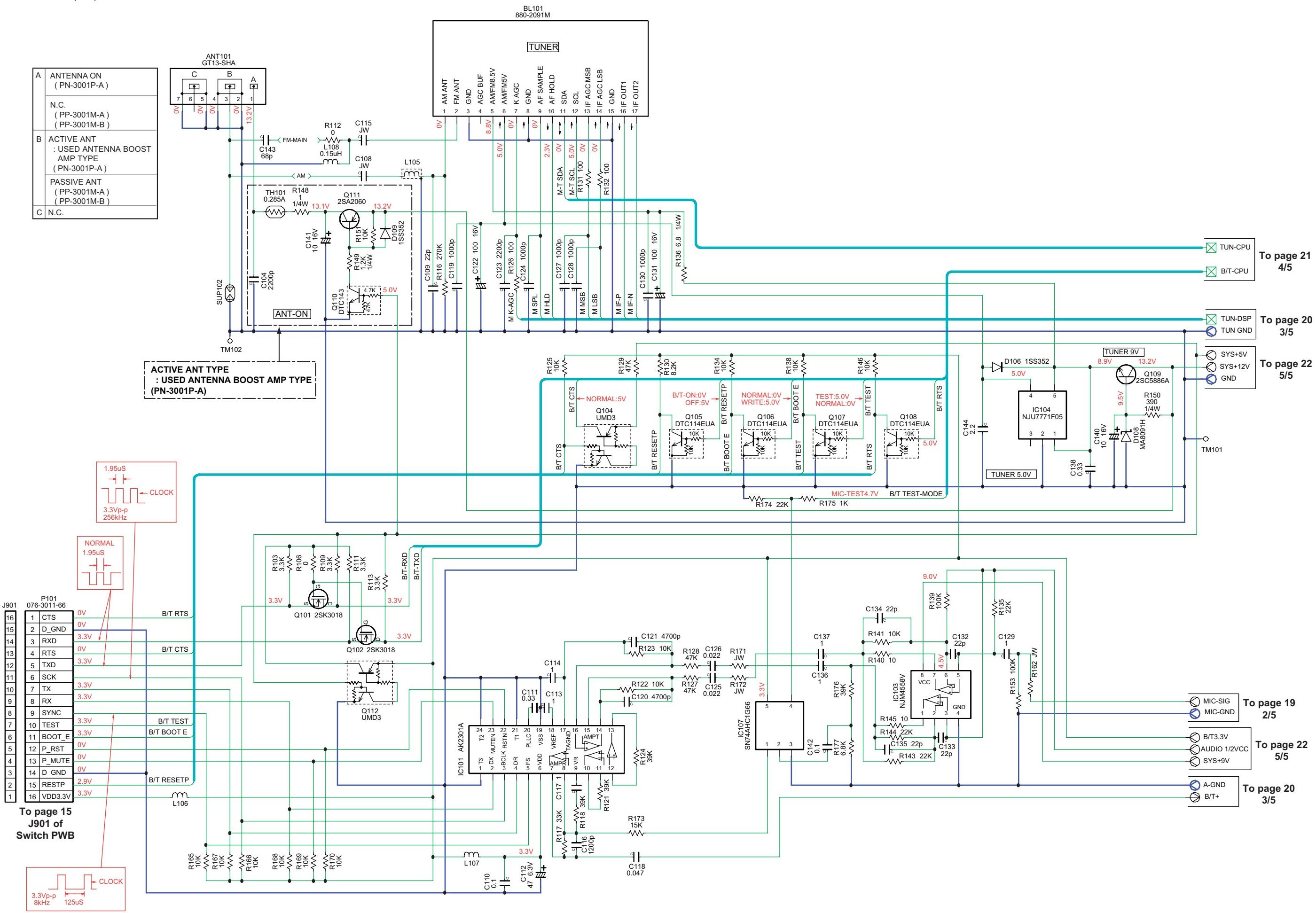
SOLDER SIDE

Caution:
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.

The parts of a dotted line express the parts on a component side.

CIRCUIT DIAGRAM

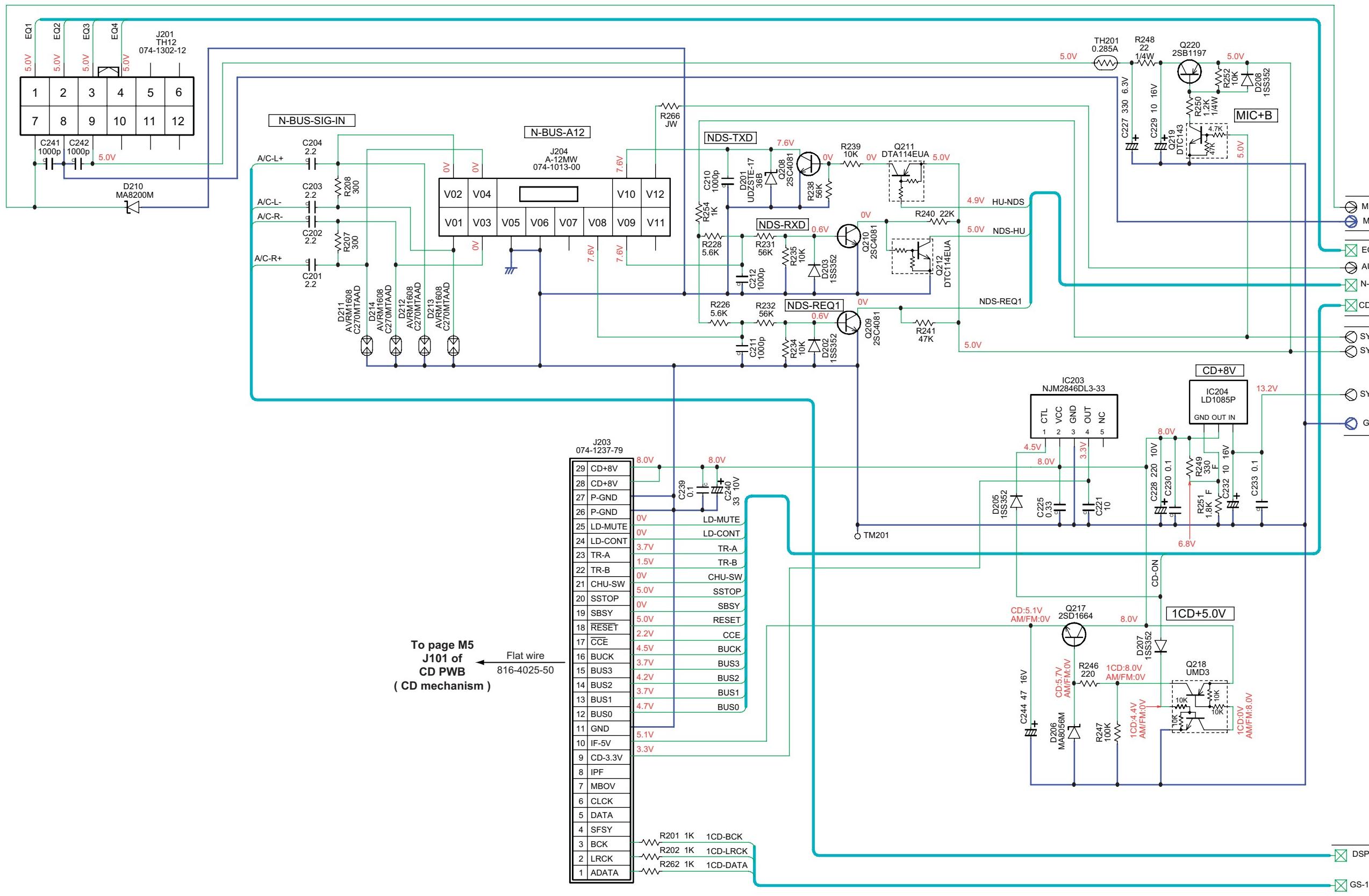
Main PWB(B2) section 1/5



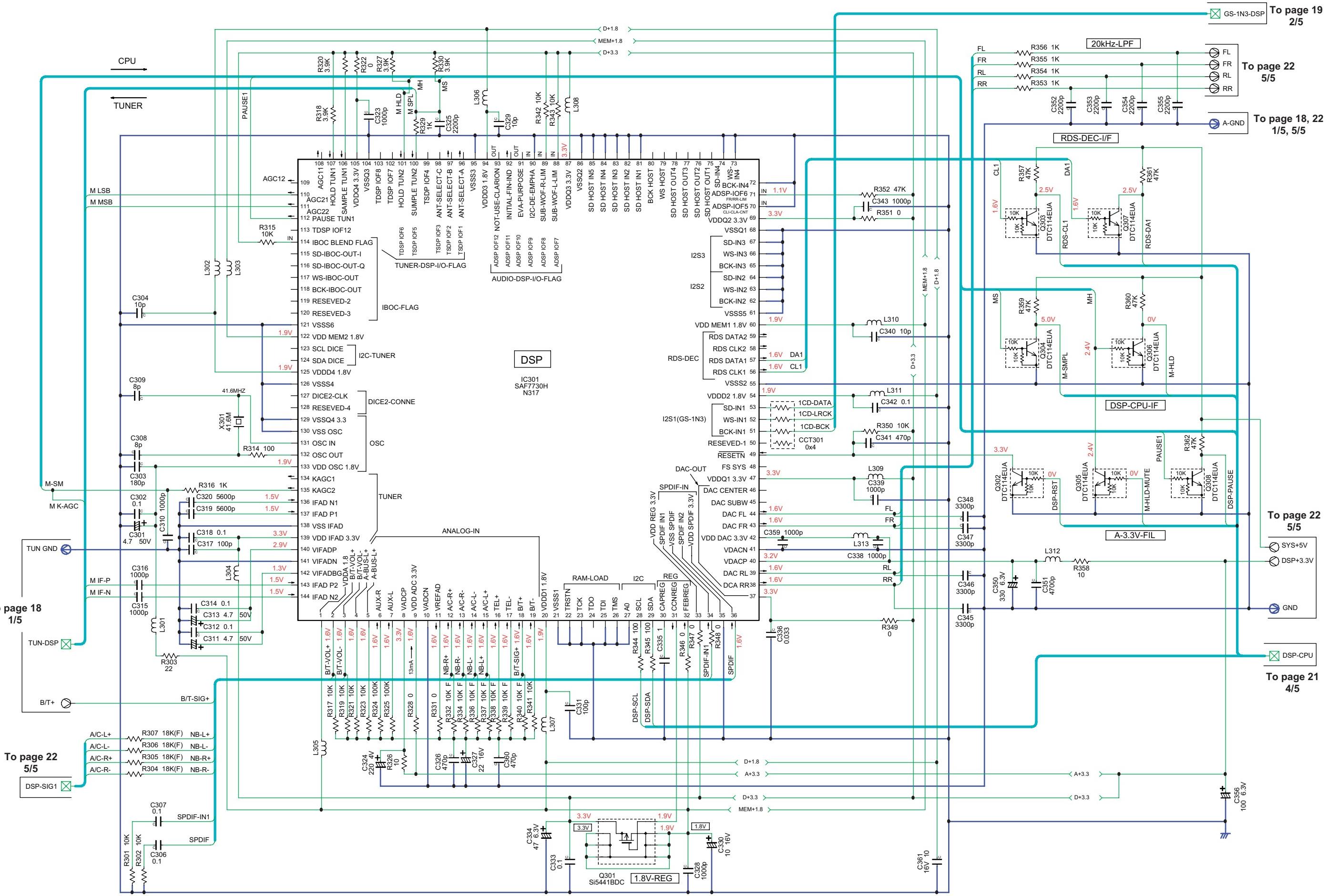
Main PWB(B2) section 2/5

1	EQ1	7	MIC SIGNAL
2	EQ2	8	MIC GND
3	EQ3	9	MIC VCC
4	EQ4	10	N.C.
5	N.C.	11	N.C.
6	N.C.	12	N.C.

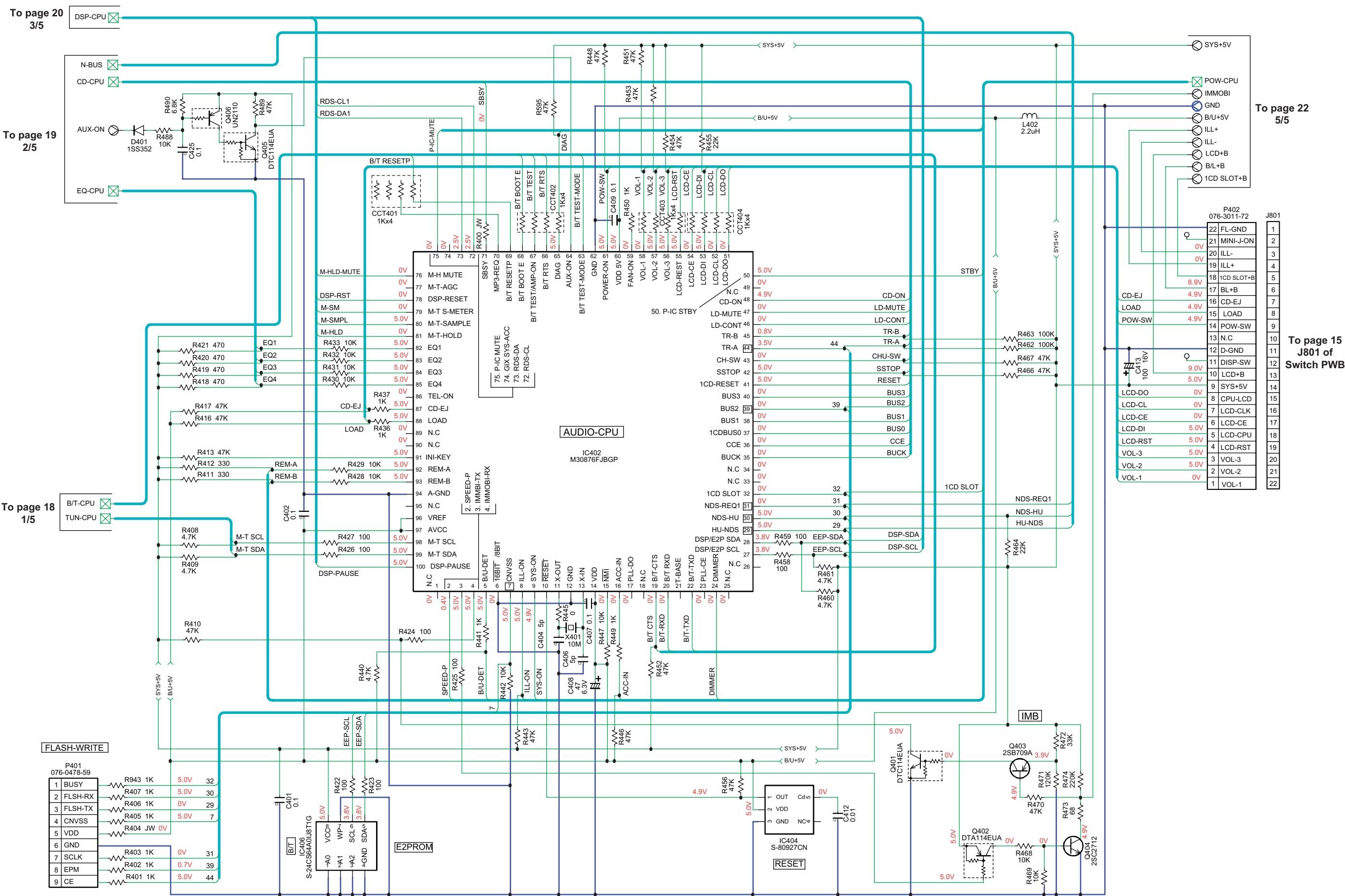
V01	CD-LH(-)	V07	N.C.
V02	CD-LH(+)	V08	CHG - REQ1
V03	CD-RH(-)	V09	CHG - COMBI (RXD)
V04	CD-RH(+)	V10	COMBI - CHG (TXD)
V05	EARTH	V11	N.C.
V06	SHIELD-EARTH	V12	AUX-ON

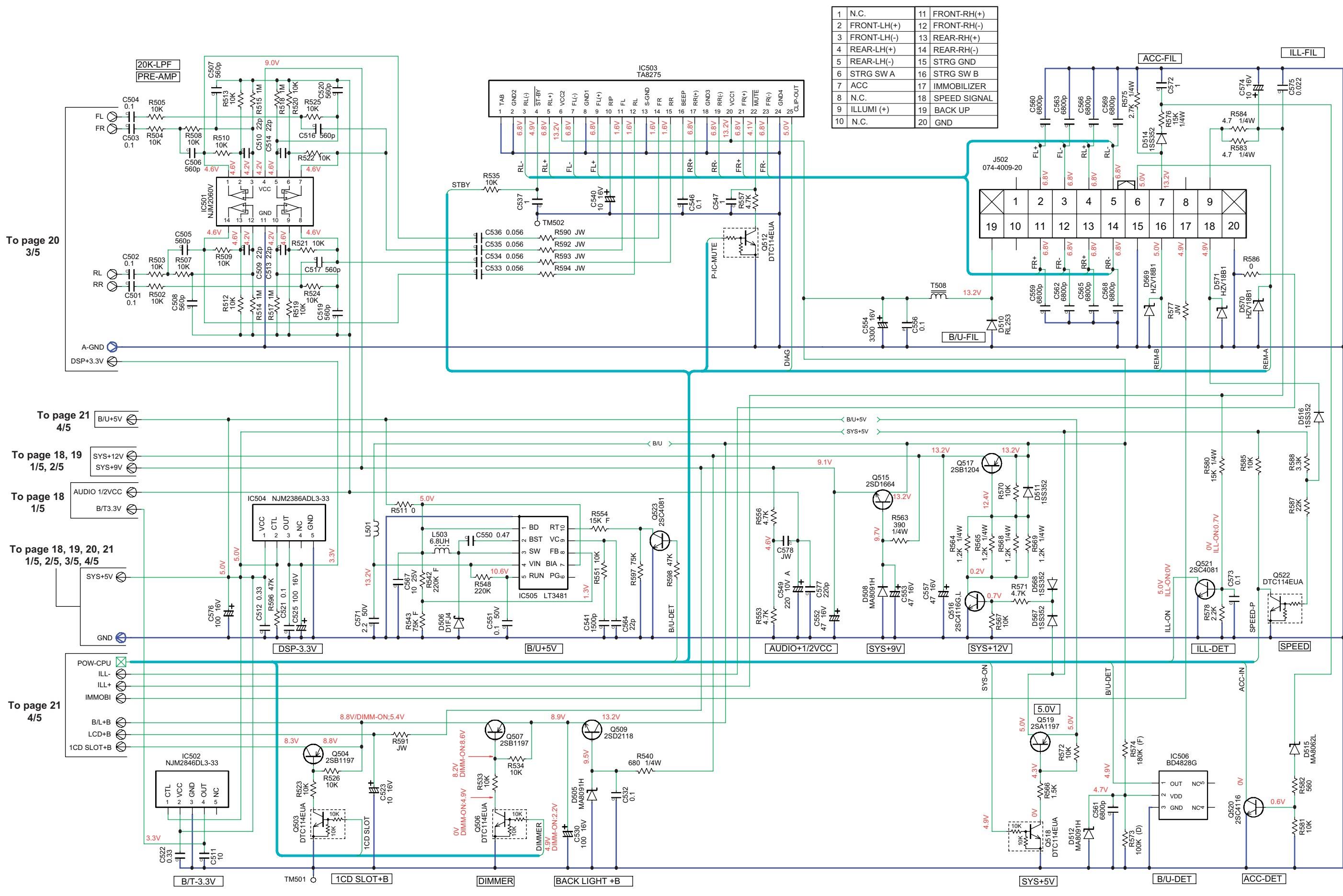


Main PWB(B2) section 3/5

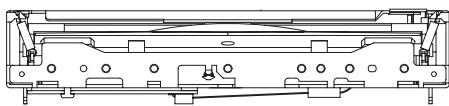


Main PWB(B2) section 4/5





Service Manual



CD mechanism

Model 929-5004-81

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions in soldering

Please do not spread liquid flux in soldering.

Please do not wash the soldering point after soldering.

6. Cautions in soldering for chip capacitors

Please solder the chip capacitors after pre-heating for replacement because they are very weak to heat. Please do not heat the chip capacitors with a soldering iron directly.

7. Cautions in handling for chip parts.

Please do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc).

Please make an operation test after replacement.

8. Cautions in handling flexible PWB

Please work with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

9. Turn the unit OFF during disassembly and parts replacement.

Recheck all work before you apply power to the unit.

10. Cautions in checking that the optical pickup lights up.

The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

11. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

11-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

11-2. Actuator

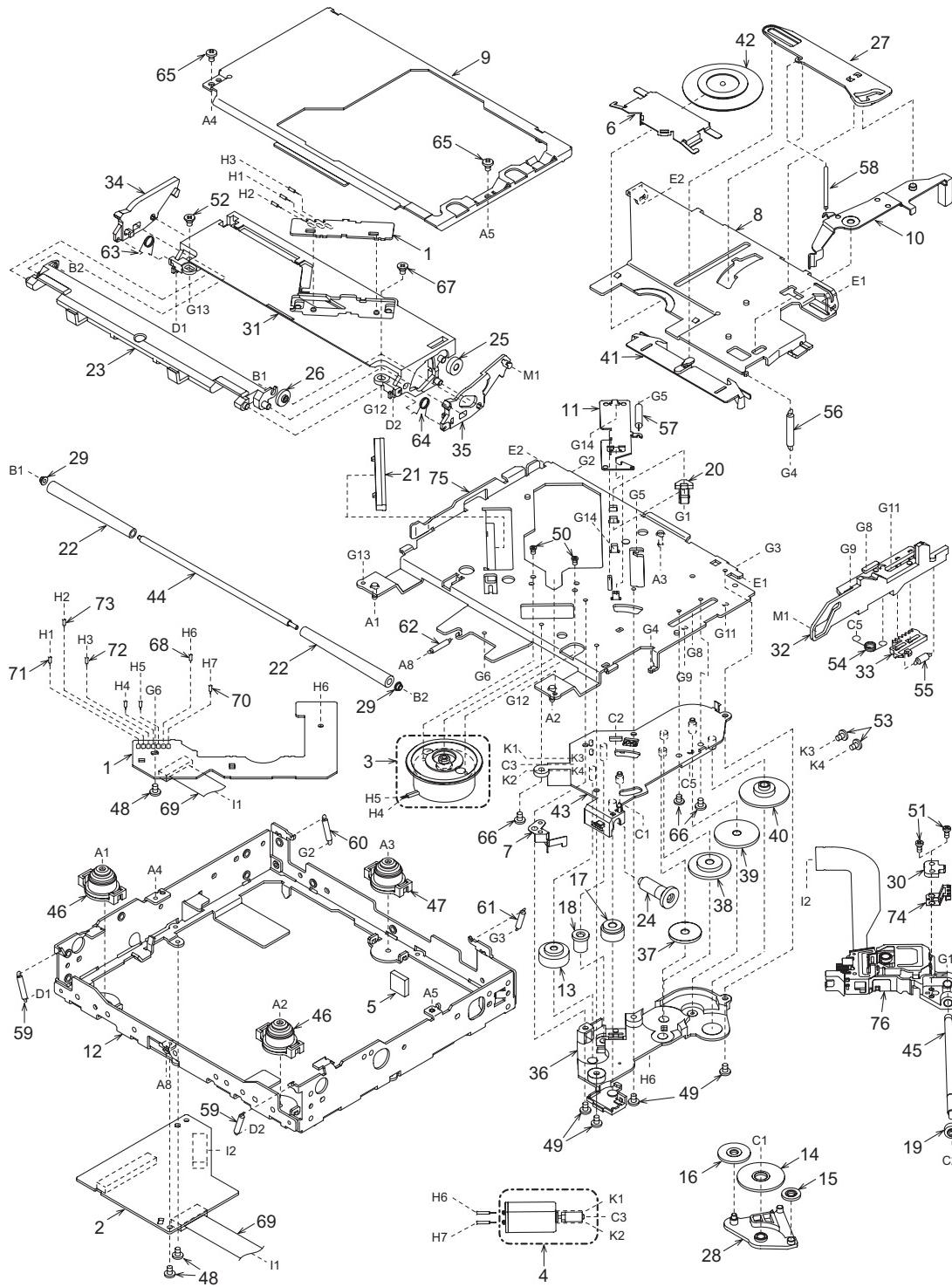
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it, its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

11-3. Cleaning the lens

Dust on the optical lens affects performance.

To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

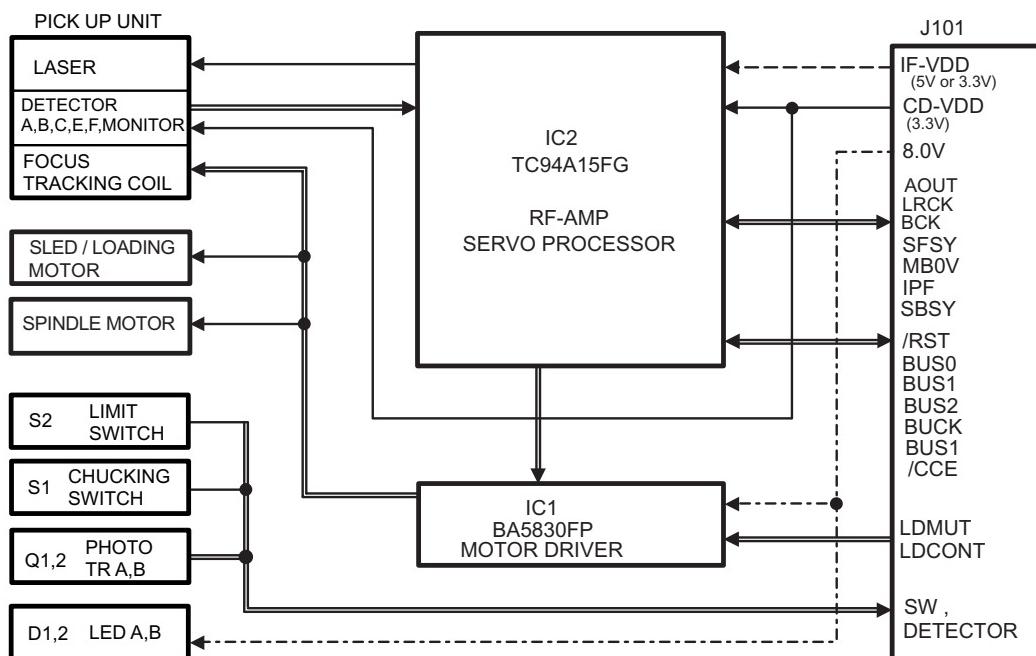
EXPLODED VIEW/PARTS LIST



NO.	PART NO.	DESCRIPTION	Q'TY
21	621-0624-22	GUIDE RAIL	1
22	621-0711-21	LOADING ROLLER	2
23	621-0718-21	ROLLER GUIDE	1
24	621-0719-20	ROLLER GEAR B	1
25	621-0720-20	ROLLER GEAR C	1
26	621-0721-20	ROLLER GEAR D	1
27	621-0728-20	STOPPER LINK	1
28	621-1719-20	IDLE CASE	1
29	621-1726-20	ROLLER SLEEVE	2
30	621-1729-20	SH-BASE	1
31	621-1742-20	UPPER GUIDE	1
32	621-1743-20	SHIFT LEVER	1
33	621-1744-20	RACK	1
34	621-1745-20	LOCK ARM L	1
35	621-1746-20	LOCK ARM R	1
36	621-1747-20	GEAR COVER	1
37	621-1748-20	POWER GEAR A	1
38	621-1749-20	POWER GEAR B	1
39	621-1750-20	POWER GEAR C	1
40	621-1751-20	POWER GEAR D	1
41	621-1752-20	DISC STOPPER	1
42	621-1753-20	CLAMPER RING	1
43	621-1754-20	GEAR BASE	1
44	622-1571-21	ROLLER SHAFT	1
45	624-0020-00	LEAD SCREW	1
46	629-0086-20	DAMPER F	2
47	629-0087-20	DAMPER R	1
48	716-1507-01	SCREW(M2x3)	3

NO.	PART NO.	DESCRIPTION	Q'TY
49	716-1670-01	SCREW(M2x4)	4
50	716-1733-01	SCREW(M1.7x2.3)	2
51	716-3469-01	SCREW(1.7x4)	2
52	716-3473-01	SCREW(M2x3)	1
53	716-3551-00	SCREW(M1.4x2.5)	2
54	750-7865-20	SHIFT SPRING	1
55	750-7866-20	RACK SPRING	1
56	750-7867-20	CLAMPER SPRING	1
57	750-7868-20	ID-LOCK SPRING	1
58	750-7869-20	SENSOR SPRING	1
59	750-7870-20	DR-SPRING F	2
60	750-7871-20	DR-SPRING RA	1
61	750-7872-20	DR-SPRING RB	1
62	750-7873-20	DR-SPRING C	1
63	750-6797-20	ROLLER SPRING L	1
64	750-6798-20	ROLLER SPRING R	1
65	714-2003-8B	SCREW(M2x3)	2
66	780-2025-00	SCREW(M2x2.5)	3
67	781-1730-00	SCREW(M1.7x3)	1
68	803-4906-60	VINYL-COAT-WIRE(ORG)	1
69	816-2542-01	FLAT WIRE	1
70	816-2590-00	VINYL-COAT-WIRE(GRN)	1
71	816-2591-00	VINYL-COAT-WIRE(YEL)	1
72	816-2592-00	VINYL-COAT-WIRE(BLUE)	1
73	816-2593-00	VINYL-COAT-WIRE(PUR)	1
74	966-1722-20	SH-RACK-ASSY	1
75	966-1743-21	DRIVE-PLT-ASSY	1
76	969-0071-30	PICKUP-ASSY	1

BLOCK DIAGRAM



ELECTRICAL PARTS LIST

Main PWB(BM1) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	168-1042-78	16V 0.1uF	C29	046-6822-58	6800pF	R5	033-0000-05	1/10W 0 ohm
C2	163-1073-35	16V 100uF	C30	168-1042-78	16V 0.1uF	R6	033-5621-15	1/10W 5.6k ohm
C4	178-1052-78	1uF	C31	046-4712-58	470pF	R7	033-4731-15	1/10W 47k ohm
C5	042-0560-85	6.3V 100uF	C32	046-4712-58	470pF	R8	033-3341-15	1/10W 330k ohm
C6	178-1052-78	1uF	C33	168-1042-78	16V 0.1uF	R9	033-2231-15	1/10W 22k ohm
C8	178-1052-78	1uF	C34	168-4732-78	16V 0.047uF	R10	033-2231-15	1/10W 22k ohm
C10	168-1042-78	16V 0.1uF	C35	168-4732-78	16V 0.047uF	R11	033-2731-15	1/10W 27k ohm
C11	168-1042-78	16V 0.1uF	C36	045-1007-50	10pF	R12	033-4731-15	1/10W 47k ohm
C12	045-4701-50	47pF	C37	045-1007-50	10pF	R13	033-2731-15	1/10W 27k ohm
C13	046-1532-78	0.015uF	C38	168-1042-78	16V 0.1uF	R14	033-1531-15	1/10W 15k ohm
C14	168-1042-78	16V 0.1uF	C39	046-5622-58	5600pF	R15	033-2731-15	1/10W 27k ohm
C15	046-1032-78	0.01uF	C40	168-1042-78	16V 0.1uF	R16	033-8231-15	1/10W 82k ohm
C17	046-4722-58	4700pF	CCT1	050-0140-63	1/32W 47k ohm x4J	R17	033-2731-15	1/10W 27k ohm
C18	046-1522-58	1500pF	D1	001-0367-91	ISS226	R18	033-8231-15	1/10W 82k ohm
C19	168-1042-78	16V 0.1uF	IC1	051-6079-90	BA5830FP-E2	R19	033-1051-15	1/10W 1M ohm
C20	168-1042-78	16V 0.1uF	IC2	051-6399-00	TC94A15FG	R20	119-2221-15	1/10W 2.2k ohm
C21	046-6812-58	680pF	J101	074-1228-79	29P	R22	119-0000-05	1/10W 0 ohm JW
C22	168-1042-78	16V 0.1uF	J201	074-1138-65	15P	TM1	073-0768-90	TERMINAL
C23	046-1532-78	0.015uF	J301	074-1138-60	10P	X2	061-3534-90	16.92MHz
C24	168-1042-78	16V 0.1uF	Q1	131-1188-50	2SB1188PQR	PWB	039-2845-20	PWB(WITHOUT COMPONENT)
C25	045-6801-50	68pF	R1	117-6811-15	1/8W 680 ohm			
C26	168-1042-78	16V 0.1uF	R2	117-1001-15	1/8W 10 ohm			
C27	046-3332-78	0.033uF	R3	033-2211-15	1/10W 220 ohm			

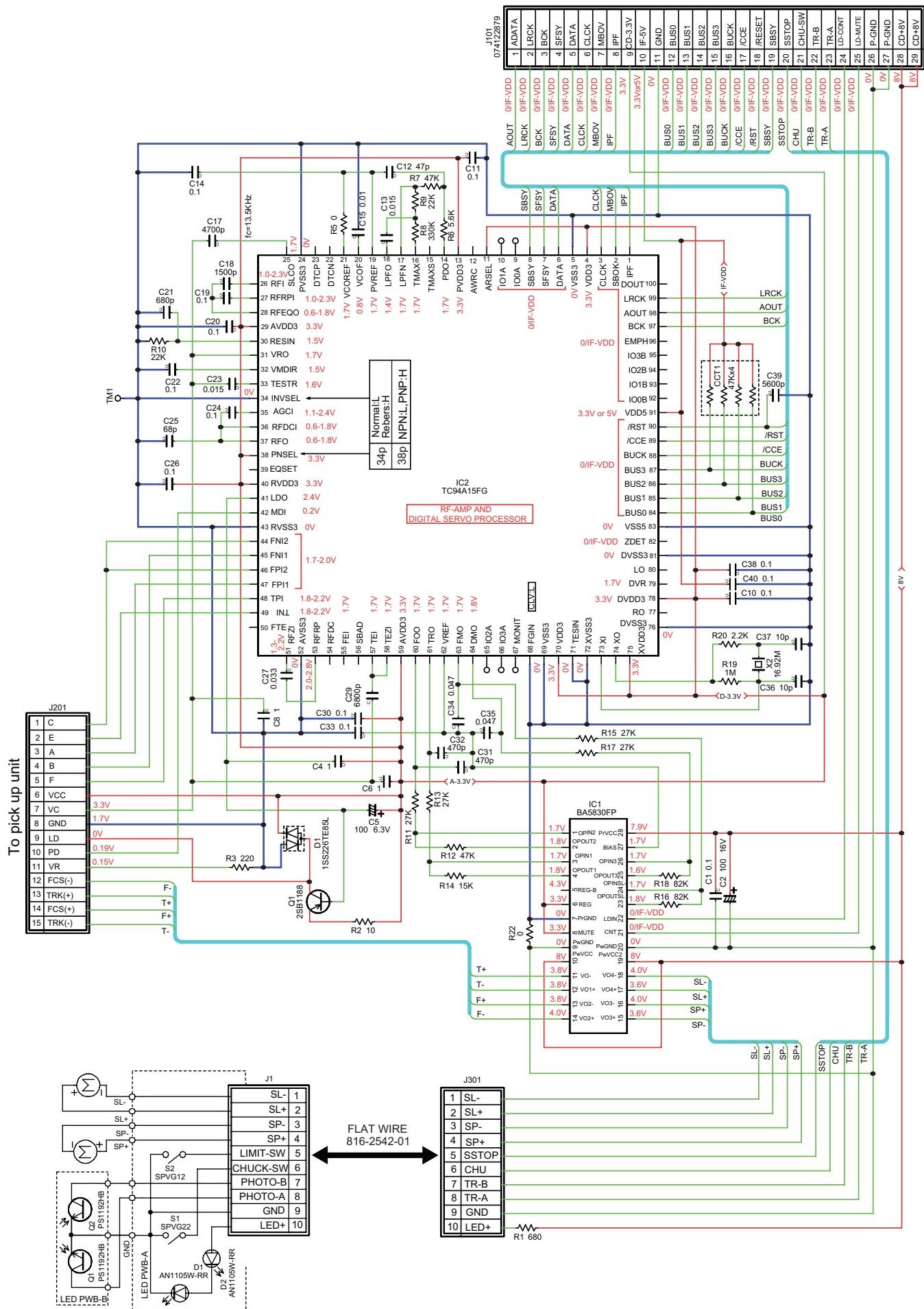
LED PWB(BM2) section

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
D1	001-7058-90	AN1105W-RR	Q1	060-4015-91	PS1192HB	S2	013-7413-50	LIMIT
D2	001-7058-90	AN1105W-RR	Q2	060-4015-91	PS1192HB	PWB	039-1944-21	PWB(WITHOUT COMPONENT)
J1	074-1138-60	10P	S1	013-7414-50	CHUCKING			

CIRCUIT DIAGRAM

CD PWB(BM1) / LED PWB(BM2) section

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J203 of Main PWB 2/5



PRINTED WIRING BOARD

CD PWB(BM1)/LED PWB(BM2) section

COMPONENT SIDE

CD PWB (BM1)

